The Maintenance Deficit

- Sometimes referred to as "crossover"
- The amount of funds transferred each year from highway construction funds to pay for routine highway maintenance and operations
- See 20-year history of maintenance and operations revenues and expenditures -this is not a new problem
- See projected impact of future maintenance deficit on highway construction by construction district
- See November 2005 Joint Legislative Audit and Review Commission briefing on maintenance funding
- See February 2008 official revenues forecast for the Highway Maintenance and Operating Fund and the Transportation Trust Fund – these issues were communicated directly to each member of the General Assembly in February 2008
- See 2003 legislation, House Bill 2259 and Senate Bill 869, requiring the Commonwealth Transportation Board to use the official revenues forecast, as recommended by Auditor of Public Accounts
- See summary of House Bill 3202 statewide funding sources
 - House Bill 3202 committed an estimated \$197 million in fiscal year 2009 to highway maintenance and operations
 - The repeal of the abusive driver fees and declining maintenance revenues make the House Bill 3202 contribution to maintenance and operations approximately \$123 million in fiscal year 2009
 - o Finally, the official revenue forecast reduced existing gas and motor vehicle sales and use tax revenues dedicated to highway maintenance and operations by approximately \$53 million in fiscal year 2009
 - This yields a net benefit to highway maintenance and operations of approximately \$70 million in fiscal year 2009

Expenditure Allocations Maintenance Land Mgt, System Safety* Operations & Administration Debt Service Transfers to Other Agenices and General Fund To Construction Total	From Construction From Federal for Highway Maintenance / HMOF Total	Recordation Tax Miscellaneous Taxes & Fees Total Major State Revenues Other VDOT Miscellaneous Revenue	Revenues Motor Fuels Tax Motor Vehicle Sales & Use Tax Motor Vehicle License Fee & IRP	
528,653,400 4,797,800 64,059,200 80,279,700 83,218,700 761,008,800	756,211,000	9,133,000 734,711,000 21,500,000	432,483,000 170,971,000 122,124,000	FY 1988
563,972,300 4,759,300 65,444,300 69,918,500 158,013,200 862,107,600	862,107,600	9,764,000 845,124,000 16,983,600	510,469,000 182,740,000 142,151,000	FY 1989
622,686,500 5,797,900 72,856,500 70,670,300 104,677,800 876,689,000	876,689,000	10,913,000 874,701,000 1,988,000	534,262,000 186,901,000 142,625,000	FY 1990
631,947,400 6,989,500 77,872,200 83,104,400 56,917,200 856,830,700	856,830,700	11,565,000 866,157,000 (9,326,300)	541,980,000 174,818,000 137,794,000	FY 1991
671,163,400 6,667,500 74,863,800 95,402,500 6,044,800 854,142,000	7,395,000 854,142,000	10,035,000 846,747,000	515,636,000 178,931,000 142,145,000	FY 1992
675,913,600 6,779,100 83,713,500 - 57,231,500 67,654,600 891,292,300	2,973,000 884,513,200 926,651,400	9,231,000 844,617,000 39,896,200	530,970,000 170,941,000 133,475,000	FY 1993
719,393,600 7,032,300 81,572,600 55,690,800 62,962,100 926,651,400	2,973,000 926,651,400	9,532,000 875,158,000 48,520,400	547,466,000 181,978,000 136,182,000	FY 1994

^{*}Programs categorized differently between maintenance and operations in different years

8

Virginia Department of Transportation Highway Maintenance and Operating Fund Budgeted Sources and Uses of State Revenues

Total 1,0		Debt Service Transfers to Other Agenices and General Fund	on	Land Mgt, System Safety*		Expenditure Allocations		From Federal for Highway Maintenance / HMOF	From Construction	evenue		Miscellaneous Taxes & Fees	Recordation Tax	Motor Vehicle License Fee & IRP	ales & Use Tax	s Tax	Revenues	
1,017,462,200	113,769,179	52,425,821	83,374,000	7,321,100	760,572,100		1,017,462,200	5,809,400		79,751,800	931,901,000	10,408,000		140,417,000	205,630,000	575,446,000		FY 1995
1,077,589,400		52,899,246	79,878,019	7,595,431	809,753,655		1,077,589,400	3,409,000		87,589,400	986,591,000	10,160,000		146,532,000	236,751,000	593,148,000		FY 1996
1,018,611,100	29,690,966	53,393,736	79,637,403	6,728,095	849,160,900		1,018,611,100	12,363,000		(5,973,900)	1,012,222,000	11,329,000		150,305,000	239,613,000	610,975,000		FY 1997
1,062,807,700	40,925,944	61,530,856	89,135,600	6,925,200	864,290,100		1,055,882,500			19,398,500	1,036,484,000	11,033,000		162,307,000	247,751,000	615,393,000		FY 1998
1,132,321,800	43,598,500	24,000,900	90,341,200	9,217,000	965,164,200		1,132,321,800		1	16,911,800		1		164,802,000	259,3/1,000	647,473,000		FY 1999
1,126,613,800	11,223,600	22,098,300	102,451,400	10,100,300	980,740,200		1,126,613,800	2,485,800		5,010,200	1,119,117,800	14,4/9,400	44 470 400	1/2,935,400	2/3,488,000	658,215,000		FY 2000

^{*}Programs categorized differently between maintenance and operations in different years

Virginia Department of Transportation Highway Maintenance and Operating Fund Budgeted Sources and Uses of State Revenues

Total	To Construction	Debt Service Transfers to Other Agenices and General Fund	Land Mgt, System Safety* Operations & Administration	Maintenance	Expanditure Allocations	Total	From Federal for Highway Maintenance / HMOF	From Construction	Other VDOT Miscellaneous Revenue	Total Major State Revenues	Recordation Tax Miscellaneous Taxes & Fees	Motor Vehicle License Fee & IRP	Motor Vehicle Sales & Use Tax	Revenues Motor Fuels Tax	
1,188,694,100	4,007,600	23 328 600	8,866,600 99,366,900	1,053,124,400		1,188,694,100	5,696,700	25	14,295,600	1,168,701,800	13,421,800	177,607,000	293,929,000	683,744,000	FY 2001
1,268,023,000		7,000,000	12,756,900	1,107,612,000		1,268,023,000	23,025,900	3,554,350	24,296,750	1,217,146,000	33,228,000	183,644,000	320,565,000	679,709,000	FY 2002
1,334,312,272		3,500,000 57,257,900	132,071,072	1,128,284,300		1,321,113,272	1,502,800	147,248,472	7,314,000	1,165,048,000	1	193,195,000	279,682,000	692,171,000	FY 2003
1,456,360,780		3,500,000 107,722,917	137,374,169	1,207,763,694		1,454,457,468	15,000,000	56,902,270	7,303,180	1,375,252,018	87,552,018	218,000,000	350,800,000	718,900,000	FY 2004
1,606,508,040		49,089,287	280,697,367	1,278,722,394		1,609,351,348	1	244,617,558	20,652,890	1,324,715,700	18,315,700	186,900,000	385,800,000	733,700,000	FY 2005
1,707,324,431	4 707 024 424	46,964,300	283,933,985	1,364,932,336		1,707,924,431	106,972,936	186,199,495	29,047,646	1,385,704,354	20,131,354	205,700,000	406,373,000	754,100,000	FY 2006

^{*}Programs categorized differently between maintenance and operations in different years

Virginia Department of Transportation Highway Maintenance and Operating Fund Budgeted Sources and Uses of State Revenues

	FY 2007	FY 2008
Revenues		
Motor Fuels Tax	746,400,000	757,600,000
Motor Vehicle Sales & Use Tax	404,100,000	393,900,000
Motor Vehicle License Fee & IRP	210,000,000	309,200,000
Recordation Tax		
Miscellaneous Taxes & Fees	(11,532,323)	32,800,000
Total Major State Revenues	1,348,967,677	1,493,500,000
Other VDOT Miscellaneous Revenue	42,143,495	43,921,528
From Construction	286,302,594	260,570,133
From Federal for Highway Maintenance / HMOF	178,225,294	143,038,194
Total	1,855,639,060	1,941,029,855

1,941,029,855	1,855,639,060 1,941,029,855	Total
		To Construction
46,189,687	45,078,847	Transfers to Other Agenices and General Fund
		Debt Service
311,586,173	312,277,558	Operations & Administration
		Land Mgt, System Safety*
1,583,253,995	1,498,282,655 1,583,253,995	Maintenance
		Expenditure Allocations

^{*}Programs categorized differently between maintenance and operations in different years

Virginia Department of Transportation Highway Maintenance and Operating Fund Budgeted Sources and Uses of State Revenues

			Working Draft Plan	an		
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Revenues						
Motor Fuels Tax	777,800,000	788,300,000	807,200,000	823,700,000	842,800,000	849,400,000
Motor Vehicle Sales & Use Tax	376,000,000	384,400,000	389,500,000	404,200,000	423,900,000	422,500,000
Motor Vehicle License Fee & IRP	302 900,000	309,700,000	312,500,000	316,000,000	319,500,000	322,500,000
Recordation Tax	15,300,000	16,700,000	16,500,000	16,400,000	16,400,000	16,700,000
Miscellaneous Taxes & Fees	15,800,000	15,900,000	16,000,000	16,100,000	16,200,000	16,300,000
Total Major State Revenues	1,487,800,000	1,515,000,000	1,541,700,000	1,576,400,000	1,618,800,000	1,627,400,000
Other VDOT Miscellaneous Revenue	(22, 195, 333)	19,589,667	18,639,667	18,639,667	18,639,667	18,639,667
From Construction	388,117,994	386,983,622	432,307,038	471,077,647	504,890,403	575,689,712
From Federal for Highway Maintenance	157,117,771	160,738,409	166,316,007	172,492,786	178,993,192	187,071,739
Total	2,010,840,432	2,082,311,698	2,158,962,712	2,238,610,100	2,321,323,262	2,408,801,118
Expenditure Allocations						
Maintenance	1,671,246,276	1,733,817,273	1,800,953,897	1,870,859,588	1,943,407,017	2,020,581,646
Operations & Administration	291,617,670	300,229,730	308,881,019	317,792,778	326,973,225	336,423,809
Transfers to Other Agenices and General Fund To Construction	47,976,486	48,264,695	49,127,796	49,957,734	50,943,020	51,795,663
	2040 040 422	2 082 311 698	2.158.962.712	2.238.610.100	2.321,323,262	2,321,323,262 2,408,801,118

Impact of Maintenance Deficit on Highway Construction by District

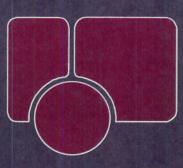
(in millions)

TOTAL	Staunton	Salem	Richmond	NoVA	Lynchburg	Hampton Roads	Fredericksburg	Culpeper	Bristol	
(\$260.6)	(20.3)	(25.5)	(37.9)	(49.6)	(19.3)	(53.8)	(18.1)	(16.6)	(\$19.5)	FY08
(388.1)	(30.1)	(38.0)	(56.5)	(74.1)	(28.6)	(80.3)	(27.0)	(24.6)	(\$28.8)	FY09
(387.0)	(30.0)	(37.9)	(56.3)	(73.9)	(28.5)	(80.0)	(27.0)	(24.5)	(\$28.8)	FY10
(432.3)	(33.6)	(42.3)	(62.9)	(82.6)	(31.8)	(89.5)	(30.1)	(27.3)	(\$32.1)	FY11
(471.1)	(36.5)	(46.1)	(68.6)	(90.0)	(34.7)	(97.6)	(32.8)	(29.8)	(\$34.9)	FY12
(504.9)	(39.1)	(49.4)	(73.5)	(96.5)	(37.2)	(104.6)	(35.2)	(31.9)	(\$37.4)	FY13
(\$575.7)	(44.6)	(56.3)	(83.9)	(110.1)	(42.4)	(119.4)	(40.2)	(36.3)	(\$42.6)	FY14

[•]In FY08, maintenance deficit exceeded total funding available for the statewide secondary construction program

In FY11 maintenance deficit will exceed both the statewide secondary and urban construction program

Joint Legislative Audit and Review Commission of the Virginia General Assembly

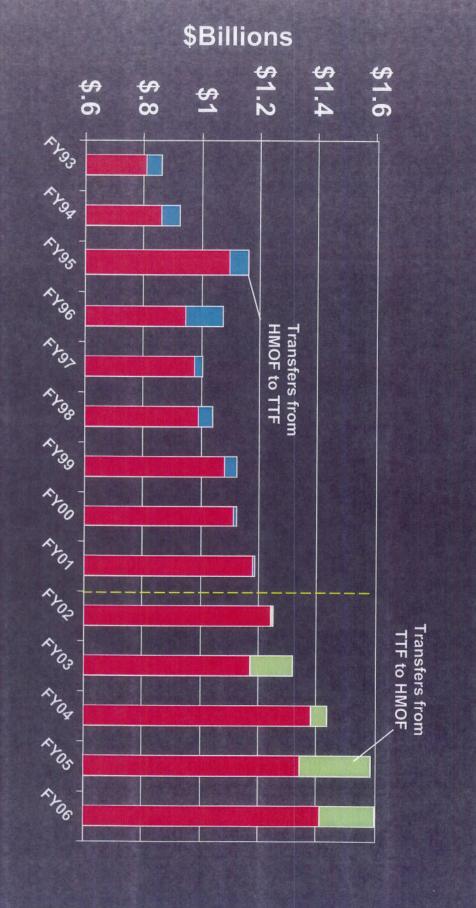


VDOT Maintenance Program

Briefing to Senate START Task Force October 20, 2005

Hal Greer Division Chief, JLARC

Highway Maintenance and Operating Fund No Longer Fully Pays for Maintenance



HMOF funds maintenance, local street payments, and administration.



COMMONWEALTH of VIRGINIA

Pierce R. Homer Secretary of Transportation Office of the Governor
P.O. Box 1475
Richmond, Virginia 23218

(804) 786-8032 Fax: (804) 786-6683 TTY: (800) 828-1120

TO:

Governor Kaine

General Assembly

Local Governments

FROM:

Pierce R. Homer Pierce & Amer

DATE:

February 25, 2008

RE:

Revised Transportation Revenue Forecast

In response to the current economic climate, the Commonwealth Transportation Board received the attached presentation on February 20, 2008. This presentation incorporated the November 2007 revenue revisions, the elimination of the abusive driving fees and the February 2008 revenue revisions. The cumulative effect of these revenue revisions will be to reduce the current Six Year Program by approximately \$1.1 Billion, as illustrated in the attached spreadsheet.

Assuming federal revenues remain steady, highway maintenance and interstate highway construction should remain relatively constant. Transit allocations will be reduced by approximately 10%. Primary, secondary, and urban highway construction will be reduced by approximately 44%. Local impact data will be provided later this week.

These reductions pose a very serious financial challenge to the current Six Year Program, especially for regional and local highway construction.

Please contact Commissioner Ekern, Mr. Tucker or me with any questions you may have.

PRH: mr

Attachments

Cc:

Senate Finance

House Appropriations

VML VACO

State Transportation Revenues
Comparison of Official Forecast (May 2007) and February 2008 Revenue Forecast
(Dollars in Millions)

		Summary	
Total	ITF	HWOF	Fund
Official Forecast (May 2007) February 2008 Difference	Official Forecast (May 2007) February 2008 Difference	Official Forecast (May 2007) February 2008 Difference	Forecast
\$2,487.2	\$993.7	\$1,493.5	2008
\$2,408.6	\$956.9	\$1,451.7	
(\$78.6)	(\$36.8)	(\$41.8)	
\$2,812.9	\$1,202.2	\$1,610.7	2009
\$2,836.1	\$1,148.3	\$1,487.8	
(\$176.8)	(\$53.9)	(\$172.9)	
\$2,907.3	\$1,248.7	\$1,658.6	1 1
\$2,706.9	\$1,191.9	\$1,515.0	
(\$200.4)	(\$56.8)	(\$143.6)	
\$2,975.8	\$1,286.2	\$1,689.6	2011
\$2,775.5	\$1,233.8	\$1,541.7	
(\$200.3)	(\$52.4)	(\$147.9)	
\$3,046.9	\$1,327.7	\$1,719.2	2012
\$2,851.1	\$1,274.7	\$1,576.4	
(\$185.8)	(\$53.0)	(\$142.8)	
\$3,080.4	\$1,358.1	\$1,7223	2013
\$2,939.6	\$1,320.8	\$1,618.8	
(\$140.8)	(\$37.3)	(\$103.5)	
\$3,094.6	\$1,370.2	\$1,724.4	
\$2,978.6	\$1,351.2	\$1,627.4	
(\$116.0)	(\$19.0)	(\$97.0)	
\$20,405.1	\$8,786.8	\$11,618.3	Grand Total
\$19,296.4	\$8,477.6	\$10,818.8	
(\$1,108.7)	(\$309.2)	(\$789.5)	

State Transportation Revenues Comparison of Official Forecast (May 2007) and February 2008 Revenue Forecast (Dollars in Millions)

	LOCALS																											HMOF	Fund
	HWOT				International Registration Plan				Road Tax			Miscellaneous			Motor Vehicle License Fees			Recordation Tax (1 cent)			Motor Vehicle Sales and Use Tax				Motor Fuels Tax			Abusive Driver Fees	Revenue Source
Difference	February 2008	OR	Difference	February 2008	Official Forecast (May 2007)		Difference	February 2008	Official Forecast (May 2007)	Difference	February 2008	Official Forecast (May 2007)	Difference	February 2008	Official Forecast (May 2007)	Difference	February 2008	Official Forecast (May 2007)	Difference	February 2008	Official Forecast (May 2007)		Difference	February 2008	Official Forecast (May 2007)	Difference	February 2008	Official Forecast (May 2007)	Forecast
(\$41.8)	\$1,483.0	1000	\$0.0	\$64.5	\$64.5		57.00	(\$0.5)	(\$2.4)	(\$0.6)	\$15.6	\$16.4	(\$9.6)	\$231.7	\$241.3	0.00	\$0.0	\$0.0	(\$24.5)	\$369.4	\$393.9	(mone)	(80 0)	\$770.8	\$779.8	\$0.0	\$0.0	0.0\$	2008
(\$122.9)	\$1,487.8		\$0.0	\$86.6	\$86.6		\$0.7	(\$1.7)	(\$2.4)	(\$0.9)	\$15.8	\$16.7	(\$4.8)	\$236.3	\$241.1	(\$24)	Sign	\$17.7	(\$29.6)	\$376.0	\$405.6	(Mar. 1994)	(S)4 (I)	\$779.5	\$803.5	(\$81.9)	\$0.0	\$81.9	2009
(\$143.6)	\$1,515.0		\$0.1	\$68.8	\$66.7		(\$0.4)	(\$2.9)	(\$2.5)	(\$1.1)	\$15.9	\$17.0	(\$2.1)	\$240.9	\$243.0	(\$2.8)	\$16.7	\$19.3	(\$33.0)	\$384.4	\$417.4	1900.11	/\$20 M	\$791.2	\$830.3	(\$65.4)	\$0.0	\$65.4	2010
(\$147.9)	\$1,541.7		\$0.1	\$70.9	\$70.8		(\$0.7)	(\$3.3)	(\$2.6)	(\$1.3)	\$16.0	\$17.3	(\$0.5)	\$241.6	\$242.1	(\$2.6)	\$10.5	\$19.1	(\$34.4)	\$389.5	\$423.9	(4.40.1)	18.62	\$810.5	\$853.6	(5)		\$85.4	201
(\$142.8)	\$1,719.2		\$0.1	\$73.0	\$72.9		(\$1.2)	(\$3.8)	(\$2.6)	(\$1.5)	\$16.1	\$17.6	\$0.4	\$243.0	\$242.6	(\$2.7)	\$16.4	\$19.1	(\$27.5)	\$4P.2	\$431.7	(0.074)	16.845)	\$827.5	\$872.5	(\$65.4)	\$0.0	\$65.4	2012
(\$103.5)	\$1,618.8		\$0.5	\$75.2	\$74.7		3	(\$3.8)	(\$27)	(\$1.6)	\$16.2	\$17.8	\$1.7	\$244.3	\$242.6	(\$2.9)	S 0.4	\$19.3	(\$8.3)	\$423.9	\$432.2	(1.036)	14 aca	\$846.6	\$873.0	(\$65.4)	\$0.0	\$85.4	2013
(\$97.0)	\$1,724.4 \$1,627.4		\$0.9	\$77.5	\$76.6	4	50	(\$3.8)	(\$2.7)	(\$1.5)	\$16.3	\$17.8	\$2.4	\$245.0	\$242.6	(\$2.8)	\$16.7	\$19.5	(\$9.7)	\$422.5	\$432.2	(0.014)	/64D 01	\$853.2	\$873.0	(\$65.4)	\$0.0	85.4	2014
	\$10,818.8		\$1.7	\$498.5	\$494.8	1	(8.18)	(\$19.8)	(\$17.9)	(\$8.5)	\$112.1	\$120.6	(\$12.5)	\$1,682.8	\$1,695.3	(\$16.0)	\$98.0	\$114.0	(\$167.0)	\$2,769.9	\$2,936.9	1.00mg	18 MAC 31	\$5,679.3	\$5,885.7	(\$388.9)	\$0.0	\$388.9	Grand Total

State Transportation Revenues Comparison of Official Forecast (May 2007) and February 2008 Revenue Forecast (Dollars in Millions)

	CHRIST	Totale															20.000																						TTF	Fund
	200	TTC			Insurance Premiums (1/3)			Motor Fuels Tax				Rental Tax			Motor Vehicle License Fees				DTC Base			Road Tax			AVIATION FUELS LAX	* - 1			Recordation Tax (2 cent)			Interest Earnings			William and the phases an emission, making an analysis as	Motor Vehicle Sales and I ke Tay			Retails Sales and Use Tax	Revenue Source
Difference	February 2008	OR STEER STORY	Difference	February 2008	Official Forecast (May 2007)	Difference	February 2008	Official Forecast (May 2007)	ALPHONISTS OF STANFOLD	Timerance	February 2008	Official Forecast (May 2007)	Difference	February 2008	Official Forecast (May 2007)	Marie Contractor State Contractor	Difference	Enhant 2006	OR	Difference	February 2008	Official Forecast (May 2007)	Chicical	Difference	Official Forecast (May 2007)		Difference	February 2008	Official Forecast (May 2007)	Difference	February 2008	Official Forecast (May 2007)		Difference	February 2008	- 1	Difference	February 2008	Official Engenast (May 2007)	Enranget
(\$36.8)	\$856.9	2000	\$0.0	\$0.0	\$0.0	\$4.0	\$112.7	\$108.1	8.00	500	100 to	2 153	(\$0.2)	\$21.4	\$21.6	*0.0	920.0	\$20.0		\$0.2	\$8.0	\$8.4	(2.16)	194.4	\$3.0		\$0.0	\$0.0	ons	(\$9.1)	\$43.5	\$52.6		(\$13.2)	SIORD	300	(\$18.2)	\$517.8	2000	2000
(\$53.9)	\$1,202.2	2000	\$7.5	\$139.5	\$132.0	\$2.2	\$113.1	\$110.9	90.0	60.0	2000	6237.3	\$0.3	\$21.9	\$21.6	48.0	0.026	\$20.0		\$0.0	S (0)	200	(2.1¢)	32.0	\$3.8		(\$4.7)	\$30.6	\$25.3	(\$15.8)	\$37.2	\$53.0		(\$15.9)	4.012¢		(\$26.3)	\$540.1	V 0629	3050
(\$56.8)	\$1,248.7		\$6.0	\$144.8	\$138.8	\$0.2	\$114.4	\$114.2	7.06	800.0	822. 2	£233 4	\$0.5	\$22.3	\$21.8	90.0	920.0	\$20.0		(\$0.1)	88 6	200	(31.4)	\$2.0	\$4.0		(\$5.2)	\$33.3	7 959 7	(\$9.6)	\$38.2	\$47.8		(\$17.8)	\$224.8		(\$29.6)	\$567.6	1	-
(\$52.4)	\$1,288.2		\$8.7	\$154.0	\$145.3	\$0.2	\$117.1	\$116.9	40.4	7.70	224.0	8340	\$0.7	\$22.4	\$21.7	0.04	320.0	\$20.0		(\$0.3)	\$8.0	2	(\$1.5)	20	\$4.1		(\$5.2)	\$32.9	4 369	(\$6.7)	\$36.9	\$43.6		(\$18.5)	\$228.3		(\$30.2)	\$595.4	2011	2011
(\$53.0)	\$1,327.7		\$6.1	\$150.0	\$153.8	\$0.3	\$119.3	\$119.0	7.06	900.0	8 0 0 A 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20.0	\$0.6	\$22.4	\$21.8	7.06	\$20.0	\$20.0		(\$0.4)	S 60	7 03	(\$1.7)	\$2.6	\$4.3		(\$5.3)	\$32.8	#30 *	(\$8.1)	\$35.0	\$43.1	1000	(\$14.9)	\$232.5		(\$30.4)	\$621.1	2012	- 15. July - July - July - 15.
(\$37.3)	\$1,358.1		\$3.3	\$166.7	\$163.4	\$3.3	\$122.3	0.8118	\$1.0	930.0	8 400	9	\$0.8	\$22.6	\$21.8	0.00	\$20.0	\$20.0		(\$0.4)	20.5	4.02	(\$1.9)	\$2.6	\$4.5		(\$5.6)	\$32.0	6 3 7	(\$9.5)	\$33.2	\$42.7	14:04)	(\$4.4)	\$232.7		(\$23.9)	36/7.1 \$847.1	2013	26.26.3.3.
(0.815)	\$1,370.2		\$0.4	\$173.8	\$173.5	\$4.2	\$123.2	\$119.0	32.3	930.1	9.00.8	5	\$1.0	8.22	\$21.8	0.00	\$20.0	\$20.0		(\$0.4)	20.7	60 7	(\$2.1)	\$2.6	\$4.7		(\$5.6)	5334	2500	\$7.8	\$31.6	\$23.8	(40.4)	0.7776	\$232.7		(\$21.4)	\$660.8	2014	
(\$309.2)	\$8,786.8		\$32.0	\$638.8	\$206.8	\$15.0	\$822.1	\$807.1	44.60	1.7674	2.757.2		\$3.7	\$155.8	\$152.1	0.04	\$140.0	\$140.0		(\$1.4)	\$59.7	9000	(\$11.0)	\$18.0	\$29.0		(\$31.6)	\$105.0	2000	(\$51.0)	\$255.6	\$306.6			\$1,581.5	П	(\$180.0)	\$4,338.9	Grand Total	





Update on Transportation Revenues and **Program Impacts**

Reta R. Busher February 20, 2008

Revenue Outlook for Next Six Years

- slow since the last update in December 2007. Like the overall economy, the transportation revenue continues to
- estimate for the current and next six years was down \$387 million. The November 2007 Commonwealth Transportation Fund revenue
- \$722 million over the current and next six years On February 15th, the Department of Taxation provided a February Transportation revenue forecast update - down an additional
- that planned a year ago. As a result, the six year revenue reduction is \$1.1 billion from
- and primary construction allocations The result is a 44% average reduction in the secondary, urban,

Since June 2007 Revenue Outlook for Next Six Years - Change

- reduction -The \$722 million February 15th transportation revenue forecast
- Reflects the pending repeal of the Abusive Driver Fees
- Significant reductions in Motor Vehicle Sales and Use Taxes
- Additional reductions in Vehicle License Fees, Retail Sales and Recordation taxes

Total	TF.	HMOF	
\$ (78.6)	(36.8)	\$(41.8)	FY 2008
\$ (176.8)	(53.9)	\$ (122.9)	FY 2009
\$ (200.4)	(56.8)	\$(143.6)	FY 2010
\$ (200.3)	(52.5)	\$(147.8)	(amounts FY 2011
\$ (195.8)	(53.0)	\$(142.8)	(amounts in millions) -Y 2011 FY 2012 F
\$(140.8)	(37.4)	\$(103.4)	s) FY 2013
\$(115.9)	(18.9)	\$ (97.0)	(amounts in millions) FY 2008 FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 FY 2014
\$(78.6) \$(176.8) \$(200.4) \$(200.3) \$(195.8) \$(140.8) \$(115.9) \$(1,108.6)	(309.3)	\$(41.8) \$(122.9) \$(143.6) \$(147.8) \$(142.8) \$(103.4) \$ (97.0) \$ (799.3)	Total

Impact of Revenue Reductions

down an average of 10% a year. Formula Transit funding from the TTF plus Recordation Taxes is

					-10%	-10							Average
		-8%		-10%	-10%	-10	-10%		-12%				Reduction
		(16.9)		(19.4)	.5)	(19.5)	(18.9)		(22.3)		,		Difference
		185.5		179.6	4	174.4	169.8		158.1		•		2009-14
	69	202.4	69	\$ 199.0	9.9	\$ 193	188.7	69	180.4	69	\$ 131.8 \$ 180.4	49	2008-13
		1							lation)	ord	F + Rec	Ē	Mass Transit (TTF + Recordation
FY 201	П	Y 2013	т	FY 2011 FY 2012 FY 2013	=	FY 20	FY 2010	71	FY2009	-	FY 2008	<u>יין</u>	
				ons)	millic	(amounts in millions,	(amo						

Rail funding is flat

HMOF Shortfall / Crossover

and the construction crossover. The revenue loss in the HMOF further exasperates the fund's shortfall

	Deficit / Crossover	Federal Funding	Total
FY 2009	\$388.1	\$157.1	\$545.2
FY 2010	387.0	160.7	547.7
FY 2011	432.3	166.3	598.6
FY 2012	471.1	172.5	643.6
FY 2013	504.9	179.0	683.9
ロくいのイム			

fully support the needed HMOF transfer beginning in FY 2016. Based on this forecast, state construction funds become unavailable to

Impact to Highway Systems Construction Formula

are the primary, secondary and urban construction allocations. As a reminder, by law, the last items funded in the allocation formula

-440	-44%	-44%
-480		
(56.1	(56.1)	(56.1) (54.1)
65.8		
121.9		121.9 119.4
(56.1		
65.8	65.8	65.8 65.3
121.9		
(74.9	(74.9)	(74.9) (72.1)
87.7		87.7 87.1
\$ 162.6	\$ 162.6 \$ 1	\$ 162.6 \$ 159.2 \$
FY 2011	FY 2011 FY	FY 2011 FY 2012 FY 2013

SYIP Development

- Districts is underway The review of the Interstate and Primary priorities provided by the
- Ensuring that schedules and estimates are up to date.
- last week's revenue estimate so reductions can begin. Available funding for construction has been recalculated based on
- draft planned for early April. provided to CTB members in early March and the primary system The schedule is for the draft interstate six-year program to be
- CTB members in early March and April respectively. The draft rail and public transportation programs will be provided to

VIRGINIA ACTS OF ASSEMBLY -- 2003 SESSION

CHAPTER 560

An Act to amend and reenact § 33.1-12 of the Code of Virginia, relating to general powers and duties of the Commonwealth Transportation Board; report.

H 2259

Approved March 18, 2003

Be it enacted by the General Assembly of Virginia:

1. That § 33.1-12 of the Code of Virginia is amended and reenacted as follows:

§ 33.1-12. General powers and duties of Board; definitions.

The Commonwealth Transportation Board shall be vested with the following powers and shall have the following duties:

(1) Location of routes. - To locate and establish the routes to be followed by the roads comprising

systems of state highways between the points designated in the establishment of such systems.

(2) Construction contracts. - (a) To let all contracts for the construction and improvement of the roads comprising systems of state highways and for all activities related to passenger and freight rail and

public transportation.

- (b) The Commonwealth Transportation Board may award contracts for the construction of transportation projects on a design-build basis. The Board may annually award five design-build contracts valued no more than \$20 million. The Board may also award design-build contracts valued more than \$20 million, provided that no more than five of these latter contracts are in force at the same time. These contracts may be awarded after a written determination is made by the Commonwealth Transportation Commissioner, pursuant to objective criteria previously adopted by the Board regarding the use of design-build, that delivery of the projects must be expedited and that it is not in the public interest to comply with the design and construction contracting procedures normally followed. Such objective criteria will include requirements for prequalification of contractors and competitive bidding processes. These contracts shall be of such size and scope to encourage maximum competition and participation by agency prequalified and otherwise qualified contractors. Such determination shall be retained for public inspection in the official records of the Department of Transportation and shall include a description of the nature and scope of the project and the reasons for the Commissioner's determination that awarding a design-build contract will best serve the public interest. The provisions of this section shall supersede contrary provisions of subdivision 2 of subsection C of § 11-41 and \$ 11-41.2.
- (c) For transportation construction projects valued in excess of \$100 million, the Commonwealth Transportation Board shall require that a financial plan be prepared. This plan shall include, but not be limited to, the following: (i) a complete cost estimate for all major project elements; (ii) an implementation plan with the project schedule and cost-to-complete information presented for each year; (iii) identified revenues by funding source available each year to meet project costs: and (iv) a detailed cash-flow analysis for each year of the proposed project.

 (3) Traffic regulations. - To make rules and regulations, from time to time, not in conflict with the

laws of this Commonwealth, for the protection of and covering traffic on and the use of systems of state

highways and to add to, amend or repeal the same.

(4) Naming highways. - To give suitable names to state highways and change the names of any highways forming a part of the systems of state highways, except such roads as have been or may hereafter be named by the General Assembly.

(5) Compliance with federal acts. - To comply fully with the provisions of the present or future federal aid acts. The Board may enter into all contracts or agreements with the United States government and may do all other things necessary to carry out fully the cooperation contemplated and

provided for by present or future acts of Congress in the area of transportation.

(6) Information and statistics. - To gather and tabulate information and statistics relating to transportation and disseminate the same throughout the Commonwealth. In addition, the Commissioner shall provide a report to the Governor, the General Assembly, the Commonwealth Transportation Board, and the public concerning the current status of all highway construction projects in the Commonwealth, This report shall be posted at least four times each fiscal year, but may be updated more often as circumstances allow. The report shall contain, at a minimum, the following information for every project in the Six-Year Improvement Program: (i) project description; (ii) total cost estimate; (iii) funds expended to date; (iv) project timeline and completion date; (v) statement of whether project is ahead of, on, or behind schedule; and (vi) the name of the prime contractor. Use of one or more Internet websites may be used to satisfy this requirement. Project specific information posted on the Internet shall be updated daily as information is available.

(7) Policies and operation of Departments. - To review and approve policies and transportation objectives of the Department of Transportation and the Department of Rail and Public Transportation, to assist in establishing such policies and objectives, to oversee the execution thereof, and to report thereon to the Commonwealth Transportation Commissioner and the Director of the Department of Rail and Public Transportation, respectively.

(8) Cooperation with other agencies and local governments. - (a) To cooperate with the federal government, the American Association of State Highway and Transportation Officials and any other organization in the numbering, signing and marking of highways, in the taking of measures for the promotion of highway safety, in research activities, in the preparation of standard specifications, in the

testing of highway materials and otherwise with respect to transportation projects.

(b) To offer technical assistance and coordinate state resources to work with local governments, upon their request, in developing sound transportation components for their local comprehensive plans.

(9) Transportation. - (a) To monitor and, where necessary, approve actions taken by the Department of Rail and Public Transportation pursuant to Chapter 10.1 (§ 33.1-391.1 et seq.) of this title in order to ensure the efficient and economical development of public transportation, the enhancement of rail transportation, and the coordination of such rail and public transportation plans with highway programs.

(b) To coordinate the planning for financing of transportation needs, including needs for highways, railways, seaports, airports, and public transportation and to set aside funds as provided in § 33.1-23.03:1. To allocate funds for these needs pursuant to §§ 33.1-23.1 and 58.1-638, the Board shall adopt a Six-Year Improvement Program of anticipated projects and programs by July 1 of each year. This program shall be based on the most recent official Transportation Trust Fund revenue forecast and shall be consistent with a debt management policy adopted by the Board in consultation with the Debt Capacity Advisory Committee and the Department of the Treasury.

(c) To recommend to the General Assembly for their consideration at the next session of the General Assembly, objective criteria to be used by the Board in selecting those transportation projects to be advanced from the feasibility to the construction stage. If such criteria are enacted into law, such

objectives shall apply to the interstate, primary, and urban systems of highways.

(d) To enter into contracts with local districts, commissions, agencies, or other entities created for

transportation purposes.

(10) Contracts with other states. - To enter into all contracts with other states necessary for the proper coordination of the location, construction, maintenance, improvement and operation of transportation systems, including the systems of state highways with the highways of such other states and, where necessary, to seek the approval of such contracts by the Congress of the United States.

(11) Use of funds. - To administer, distribute, and allocate funds in the Transportation Trust Fund as

provided by law.

- (12) Financial and investment advisors. With the advice of the Secretary of Finance and the State Treasurer, to engage a financial advisor and investment advisor who may be anyone within or without the government of the Commonwealth, to assist in planning and making decisions concerning the investment of funds and the use of bonds for transportation purposes. The work of these advisors shall be coordinated with the Secretary of Finance and the State Treasurer.
- (13) The powers of the Virginia Aviation Board set out in Chapter 1 (§ 5.1-1 et seq.) of Title 5.1 and the Virginia Port Authority set out in Chapter 10 (§ 62.1-128 et seq.) of Title 62.1 are in no way diminished by the provisions of this title.
- (14) To enter into payment agreements with the Treasury Board related to payments on bonds issued by the Commonwealth Transportation Board.

(15) Outdoor theaters. - By regulation:

- (a) To prevent the erection of moving picture screens of outdoor theaters in such a manner as to be ordinarily visible from any highway;
- (b) To require that a sufficient space is left between any highway and the entrance to any outdoor theater to prevent congestion on the highway; and

(c) To require that outdoor theater entrances and exits are adequately lighted and marked.

(16) Maintenance contracts. - To let all contracts equal to or greater than \$250,000 for the maintenance of highways comprising the systems of state highways.

Throughout this title the term "systems of state highways" shall have the meaning ascribed thereto by § 1-13.40.

The term "public transportation" or "mass transit" as used in this title means passenger transportation by rubber-tired, rail, or other surface conveyance which provides shared ride services open to the general public on a regular and continuing basis. The term does not include school buses; charter or sight-seeing service; vehicular ferry service which serves as a link in the highway network; or human service agency or other client-restricted transportation.

VIRGINIA ACTS OF ASSEMBLY -- 2003 SESSION

CHAPTER 533

An Act to amend and reenact § 33.1-12 of the Code of Virginia, relating to general powers and duties of the Commonwealth Transportation Board; report.

[S 869]

Approved March 18, 2003

Be it enacted by the General Assembly of Virginia:

1. That § 33.1-12 of the Code of Virginia is amended and reenacted as follows:

§ 33.1-12. General powers and duties of Board; definitions.

The Commonwealth Transportation Board shall be vested with the following powers and shall have the following duties:

(1) Location of routes. - To locate and establish the routes to be followed by the roads comprising systems of state highways between the points designated in the establishment of such systems.

(2) Construction contracts. - (a) To let all contracts for the construction and improvement of the roads comprising systems of state highways and for all activities related to passenger and freight rail and

public transportation.

- (b) The Commonwealth Transportation Board may award contracts for the construction of transportation projects on a design-build basis. The Board may annually award five design-build contracts valued no more than \$20 million. The Board may also award design-build contracts valued more than \$20 million, provided that no more than five of these latter contracts are in force at the same time. These contracts may be awarded after a written determination is made by the Commonwealth Transportation Commissioner, pursuant to objective criteria previously adopted by the Board regarding the use of design-build, that delivery of the projects must be expedited and that it is not in the public interest to comply with the design and construction contracting procedures normally followed. Such objective criteria will include requirements for prequalification of contractors and competitive bidding processes. These contracts shall be of such size and scope to encourage maximum competition and participation by agency prequalified and otherwise qualified contractors. Such determination shall be retained for public inspection in the official records of the Department of Transportation and shall include a description of the nature and scope of the project and the reasons for the Commissioner's determination that awarding a design-build contract will best serve the public interest. The provisions of this section shall supersede contrary provisions of subdivision 2 of subsection C of § 11-41 and § 11-41.2.
- (c) For transportation construction projects valued in excess of \$100 million, the Commonwealth Transportation Board shall require that a financial plan be prepared. This plan shall include, but not be limited to, the following: (i) a complete cost estimate for all major project elements; (ii) an implementation plan with the project schedule and cost-to-complete information presented for each year; (iii) identified revenues by funding source available each year to meet project costs: and (iv) a detailed cash-flow analysis for each year of the proposed project.

(3) Traffic regulations. - To make rules and regulations, from time to time, not in conflict with the laws of this Commonwealth, for the protection of and covering traffic on and the use of systems of state

highways and to add to, amend or repeal the same.

(4) Naming highways. - To give suitable names to state highways and change the names of any highways forming a part of the systems of state highways, except such roads as have been or may hereafter be named by the General Assembly.

(5) Compliance with federal acts. - To comply fully with the provisions of the present or future federal aid acts. The Board may enter into all contracts or agreements with the United States government and may do all other things necessary to carry out fully the cooperation contemplated and

provided for by present or future acts of Congress in the area of transportation.

(6) Information and statistics. - To gather and tabulate information and statistics relating to transportation and disseminate the same throughout the Commonwealth. In addition, the Commissioner shall provide a report to the Governor, the General Assembly, the Commonwealth Transportation Board, and the public concerning the current status of all highway construction projects in the Commonwealth. This report shall be posted at least four times each fiscal year, but may be updated more often as circumstances allow. The report shall contain, at a minimum, the following information for every project in the Six-Year Improvement Program: (i) project description; (ii) total cost estimate; (iii) funds expended to date; (iv) project timeline and completion date; (v) statement of whether project is ahead of, on, or behind schedule; and (vi) the name of the prime contractor. Use of one or more Internet websites may be used to satisfy this requirement. Project specific information posted on the Internet shall be updated as information is available.

(7) Policies and operation of Departments. - To review and approve policies and transportation objectives of the Department of Transportation and the Department of Rail and Public Transportation, to assist in establishing such policies and objectives, to oversee the execution thereof, and to report thereon to the Commonwealth Transportation Commissioner and the Director of the Department of Rail and Public Transportation, respectively.

(8) Cooperation with other agencies and local governments. - (a) To cooperate with the federal government, the American Association of State Highway and Transportation Officials and any other organization in the numbering, signing and marking of highways, in the taking of measures for the promotion of highway safety, in research activities, in the preparation of standard specifications, in the

testing of highway materials and otherwise with respect to transportation projects.

(b) To offer technical assistance and coordinate state resources to work with local governments, upon their request, in developing sound transportation components for their local comprehensive plans.

(9) Transportation. - (a) To monitor and, where necessary, approve actions taken by the Department of Rail and Public Transportation pursuant to Chapter 10.1 (§ 33.1-391.1 et seq.) of this title in order to ensure the efficient and economical development of public transportation, the enhancement of rail transportation, and the coordination of such rail and public transportation plans with highway programs.

(b) To coordinate the planning for financing of transportation needs, including needs for highways, railways, seaports, airports, and public transportation and to set aside funds as provided in § 33.1-23.03:1. To allocate funds for these needs pursuant to §§ 33.1-23.1 and 58.1-638, the Board shall adopt a Six-Year Improvement Program of anticipated projects and programs by July 1 of each year. This program shall be based on the most recent official Transportation Trust Fund Revenue forecast and shall be consistent with a debt management policy adopted by the Board in consultation with the Debt Capacity Advisory Committee and the Department of the Treasury.

(c) To recommend to the General Assembly for their consideration at the next session of the General Assembly, objective criteria to be used by the Board in selecting those transportation projects to be advanced from the feasibility to the construction stage. If such criteria are enacted into law, such

objectives shall apply to the interstate, primary, and urban systems of highways.

(d) To enter into contracts with local districts, commissions, agencies, or other entities created for

transportation purposes.

(10) Contracts with other states. - To enter into all contracts with other states necessary for the proper coordination of the location, construction, maintenance, improvement and operation of transportation systems, including the systems of state highways with the highways of such other states and, where necessary, to seek the approval of such contracts by the Congress of the United States.

(11) Use of funds. - To administer, distribute, and allocate funds in the Transportation Trust Fund as

provided by law.

- (12) Financial and investment advisors. With the advice of the Secretary of Finance and the State Treasurer, to engage a financial advisor and investment advisor who may be anyone within or without the government of the Commonwealth, to assist in planning and making decisions concerning the investment of funds and the use of bonds for transportation purposes. The work of these advisors shall be coordinated with the Secretary of Finance and the State Treasurer.
- (13) The powers of the Virginia Aviation Board set out in Chapter 1 (§ 5.1-1 et seq.) of Title 5.1 and the Virginia Port Authority set out in Chapter 10 (§ 62.1-128 et seq.) of Title 52.1 ere in na-way diminished by the provisions of this title.
- (14) To enter into payment agreements with the Treasury Board related to payments on bonds issued by the Commonwealth Transportation Board.

(15) Outdoor theaters. - By regulation:

- (a) To prevent the erection of moving picture screens of outdoor theaters in such a manner as to be ordinarily visible from any highway;
- (b) To require that a sufficient space is left between any highway and the entrance to any outdoor theater to prevent congestion on the highway; and

(c) To require that outdoor theater entrances and exits are adequately lighted and marked.

(16) Maintenance contracts. - To let all contracts equal to or greater than \$250,000 for the maintenance of highways comprising the systems of state highways.

Throughout this title the term "systems of state highways" shall have the meaning ascribed thereto by § 1-13.40.

The term "public transportation" or "mass transit" as used in this title means passenger transportation by rubber-tired, rail, or other surface conveyance which provides shared ride services open to the general public on a regular and continuing basis. The term does not include school buses; charter or sight-seeing service; vehicular ferry service which serves as a link in the highway network; or human service agency or other client-restricted transportation.

HB 3202 Statewide Revenue Update

Three actions have significantly changed impact of HB 3202

Repeal of abusive driver feesSlowed economy

-Supreme Court decision regarding regional taxing authority

especially the gas tax

revenue sources,

impacting remaining

-22% change in revenue sources available

		101
As Passed	Today	Difference
Abusive Driver Fee – M \$61.9	\$0	(\$61.9)
Registration Fees – M \$92.8	\$88.7	(\$4.1)
Recordation Tax – T/M \$64.1	\$45.9	(\$18.2)
Diesel Equalization - M \$20.9	\$19.1	(\$1.8)
Insurance Premiums - D \$137.0	\$139.5	\$2.5
Total Statewide Sources \$376.7	\$293.2	(\$83.5)

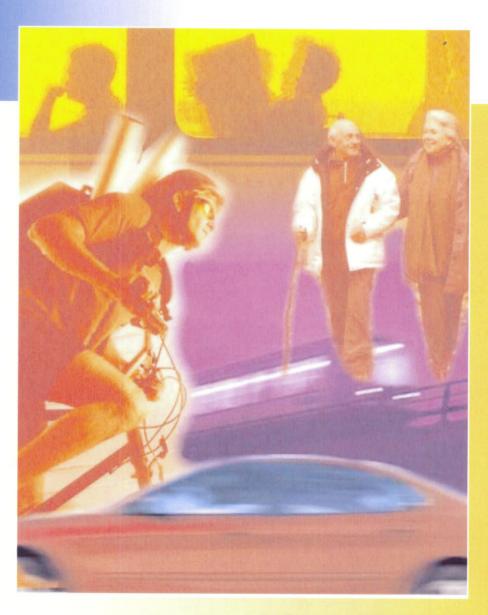
M - Maintenance T/M - 2/3rds Transit & 1/3rd Maintenance

D - Debt Service Payments for FRANs and 2007 Bond Authorization

Regional Congestion

- The General Assembly created the Northern Virginia Transportation Authority in 2002 and charged it with the responsibility of developing a regional plan and identifying funding needs to implement that plan
 - TransAction 2030 was the plan developed and it identified over \$15 billion in necessary improvements
 - TransAction 2030 also identified a regional need of \$664 million annually to pay for these improvements over and above the existing and future funding sources
 - o See attached regional plan excerpts
- The General Assembly first authorized the Hampton Roads Transportation Authority in 2002 and then established it in 2007, and charged it with developing a regional plan and identifying funding needs to implement that plan
 - o Independent toll consultants estimated that event with broad based tolling in the region, approximately \$5.1 billion was needed from other sources to complete the major regional projects
 - o In 2005 regional planners, based on the independent toll consultants report, determined that a minimum of \$275 million annually was necessary to supplement the broad based toll revenues for the six regional projects
 - o The 2007 General Assembly ratified this approach with the passage of House Bill 3202, which generated \$168 million in fiscal year 2009
 - With inflation and the addition of regional projects this number is likely substantially higher
 - See attached toll feasibility excerpts
- Following the Virginia Supreme Court decision in February 2008, it is clear that state imposition of regional taxes should be on the basis of a reasonable classification. See the attached demographic data that illustrates the unique characteristics of the Hampton Roads and Northern Virginia regions in terms of population, population density and vehicle miles traveled





SUMMARY REPORT



Northern Virginia

orthern Virginia is the Commonwealth's fastest growing region in terms of population, employment and development. People continue to be drawn to this area for job opportunities and its educational, cultural and historic attractions. Northern Virginia consists of the counties of Arlington, Fairfax, Loudoun, and Prince William; the cities of Alexandria, Fairfax, Falls Church, Manassas and Manassas Park; and the towns of Dumfries, Herndon, Leesburg, Purcellville, and Vienna.

A fundamental key to maintaining the region's prosperity is a sound transportation system. Northern Virginia's transportation network is multi-modal, consisting of roads, transit, bicycle/pedestrian networks, and two major airports. But the system is currently struggling to serve the traveling needs of residents and countless others traveling in the region for commerce or pleasure. The region must improve its transportation system or the Commonwealth will lose important jobs and their accompanying revenue.

In 2002, the Virginia General Assembly created the Northern Virginia Transportation Authority (NVTA) and charged it with developing a long-range regional transporta-



e Washington Post, December 28, 2004

tion plan. This plan, called the TransAction 2030 Plan, updates the 2020 Transportation Plan and provides the blueprint for establishing investment priorities.



The Washington Post

Northern Virginia and the Washington Region

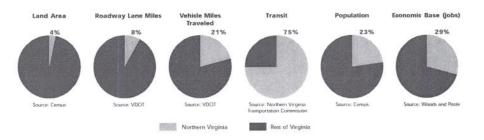
Within the next 25 years, Northern Virginia is expected to continue to attract highly educated professionals as the area absorbs approximately 651,400 new jobs, or more than half of the new jobs expected to come to the Metropolitan Washington Region. It is also projected to attract 918,500 new residents or 56 percent of those expected to relocate in the Metropolitan area. Today, Northern Virginia is home to 2,164,700 residents and 1,238,900 jobs.¹

Northern Virginia's growth in jobs and population could contribute to a regional housing shortage anticipated by the Metropolitan Washington Council of Governments. More residents will then be forced to find housing outside the Metropolitan region requiring longer commutes that will compound congestion on area roads.

 Source: Metropolitan Washington Council of Governments, Round 7.0 Cooperative Forecasts.

Northern Virginia and the Commonwealth

The Northern Virginia region accounts for 21 percent of the vehicle miles traveled (VMT) on only eight percent of the Commonwealth's roadway lane miles. It also accounts for 75 percent of transit ridership within the Commonwealth. The entire transportation system needs an infusion of resources to maintain it in good operating condition and to increase capacity.



The TransAction 2030 Plan findings include:

- Over \$15 billion are needed to complete the projects in the Plan
- All modes in the Northern Virginia transportation network are experiencing increased congestion
- Completing items in the region's CLRP does not improve the highway level of service (LOS)
- The highway LOS improves only with completion of TransAction 2030 projects
- The transit LOS analysis shows that more areas have the density to support transit service
- Both highway and transit projects are needed to solve Northern Virginia's congestion.

Challenges

- Improve travel conditions in severely congested corridors
- Better connect activity centers and enhance all modes of transportation
- Strive to attain federally mandated air quality standards
- Fund aging infrastructure needs
- Attain dedicated funding for critically needed transportation projects.

Cost Estimates

TransAction 2030 combined the cost estimates for projects currently in the Northern Virginia portion of the Metropolitan Washington region's Constrained Long-Range Plan (CLRP) with estimates for the additional TransAction 2030 improvements recommended in this report. Operation and maintenance costs were then included for all improvements. The results revealed that to fund CLRP projects alone would cost \$30 billion between 2004 and 2030; and funding TransAction 2030 Plan's additional recommended improvements would cost an additional \$16.6 billion. Thus, the full cost of implementing all of these improvements adds up to \$46.6 billion (in 2005 dollars).

- \$664 million per year in new funding will be needed to implement the TransAction 2030 Plan
- Funding sources must be arranged to satisfy this need

Operation/

Current Plan (Northern Virginia Portion of Region's CLRP) ⁽¹⁾ Total Cost (2004-2030) ⁽²⁾	System Expansion \$11.9 Billion	Preservation \$18.1 Billion	= \$30.0 Billion
Average Yearly Cost ⁽⁵⁾ Roadway Transit Bike/Pedestrian Technology Total	\$ Million \$ 256 \$ 182 \$ 1 \$ 2 \$ 441	\$ Million \$ 285 \$ 373 \$ 6 \$ 6 \$ 670	
TransAction 2030 Plan Improvements Added to Current Plan Total Cost (2006-2030)(2)	\$15.4 Billion	\$1.2 Billion ⁽⁴⁾	= \$16.6 Billion
Average Yearly Cost ⁽³⁾ Roadway Transit Bike/Pedestrian Total	\$ Million \$ 300 \$ 314 \$ 2 \$ 616	\$ Million \$ 6 \$ 41 \$ 1 \$ 48	
Grand Total TransAction 2030 Plan Costs	\$27.3 Billion	\$19.3 Billion	= \$46.6 Billion

Notes

- 1. Source: MWCOG 2004 Update to the Financially Constrained Long Range Transportation Plan (2004-2030).
- 2. Source: Results of the Financial Analysis for the 2003 Constrained Long-Range Transportation Plan, Cambridge Systematics, Inc. 2003 costs in report inflated by 10% to reflect 2005 constant dollars.
- 3. Average yearly capital system expansion estimates equal total cost in 2005 dollars divided by number of years in each Plan. Inflation and debt financing are not included.
- 4. Operation/preservation cost estimates based on projected year of completion for each project from the 2020 Plan.

Funding

billion. In addition, \$1.2 billion will be needed to operate and maintain these improvements. Meanwhile, funding from federal and state sources for highway and transit construction is becoming less certain. It is estimated that by 2018, all available state funding will be dedicated to maintenance, leaving no available money to match federal funding. There is also the challenge of meeting federal air quality standards, which if not met could mean the loss of access to federal funding for highway and transit construction. While many of the projects that are currently in the CLRP are scheduled to be built in out years, they are actually needed much sooner because of the continuing growth in employment and residents. The text box to the right illustrates revenues that could be generated through several mechanisms.

Potential Revenue Sources

Each of the following revenue sources would generate about \$175 million each year.

- Increasing the sales tax an extra one-half cent on each \$1 of taxable purchases
- Increasing the state income tax an extra \$25 for each \$10,000 of taxable income
- Increasing the gas tax an extra 17 and onehalf cents on a gallon of gas.

Note: Amounts assume participation of all Northern Virginia jurisdictions. The items above could be used to support bonds for transportation improvements.

Source: NVTC 2005

TOLL FEASIBILITY STUDY SUPPLEMENT

FINAL REPORT

Prepared For:



723 Woodlake Drive Chesapeake, Virginia 23320

Prepared by:

Baker

1304 Concourse Drive, Suite 200 Linthicum, Maryland 21090

and



Public Financial Management

CRA International

Fitzgerald & Halliday, Inc.

December 2, 2005

Table 2.2-2 Capital Sources & Cost Summary with Reduced Tolls

	P/D & E (1)	Net Total Cost (2)	Additional Funding (3)	Total Bond / Loan Funds	Funding Deficit	Const. Start Date	Toll Revenue Start Date
Scenario #1 HRX	81,000,000	4,152,372,000	76,561,900	1,270,028,000	2,805,782,100	2006	2006
Scenario #2 HRBT	36,000,000	1,845,500,000	62,631,900	932,005,600	850,862,500	2006	2006
Scenario #3 Midtown & MLK	12,600,000	548,827,600	162,276,800	404,051,400	-	2009	2009
SP&G	17,940,000	1,116,713,000	520,000,000	275,000,000	471,713,000	2010	2017
Route 460	26,820,000	1,468,264,000	321,000,000	310,000,000	1,037,264,000	2010	2018

⁽¹⁾ Preliminary design and engineering costs are estimated to be 3% of non-inflated project cost.

Note: all values are US dollars at year of accrual or expenditure

Table C-4 Project Capital Sources & Cost Summary w/ Reduced Tolls

		Sources			Funding	Const.	Toll
Project	Toll Revenue	NHS, RSTP, and Primary (1)	Total Bond / Loan Funds	Net Total Cost (2)	Deficit	Start Date	Revenue Start Date
Scenario #1 HRX	76,561,900	-	1,270,028,000	4,152,372,000	2,805782,100	2006	2006
Scenario #2 HRBT	62,631,900	-	932,005,600	1,845,500,000	850,862,500	2006	2006
Scenario #3 Midtown & MLK	162,276,800	-	404,051,400	548,827,600	-	2009	2009
Route 460	-	121,000,000	310,000,000	1,468,264,000	1,037,264,000	2010	2018
SP&G	-	370,000,000	275,000,000	1,116,713,000	471,713,000	2010	2017

⁽¹⁾ Portion scheduled in the construction period

⁽²⁾ Preliminary design and engineering have been subtracted out

⁽³⁾ NHS, RSTP, and Primary funds or toll revenues from unimproved roadways (project scenarios). Only part of these funds is used to offset capital costs; the remainder is used to increase bond capacity.

⁽²⁾ For Southeastern Parkway and Greenbelt, I-264 to I-64 and Dominion Boulevard costs are combined Note: all values are US dollars at year of accrual or expenditure

Hampton Road	Is MPO					
		2000 Census		2006 VDC	2006 VDOT Vehicle Miles Traveled	Traveled
		Population		Vehicle Miles		% of State
	Population	Density	Land Area	Traveled	Lane Miles	VMT
TOTAL	1.542.144	770.6	2.001 1	38 598 097	7 260 0	47 /%
			2001	00,000		0/1:71
WHOLLY	1,507,364	844.7	1,784.5	37,542,607	6,894.9	16.9%

			detection depries region transportation rigining board			
		2000 Census		2006 VDC	2006 VDOT Vehicle Miles Traveled	Traveled
		Population		Vehicle Miles		% of State
	Population	Density	Land Area	Traveled	Lane Miles	VMT
TOTAL	1,815,197	1,381.0	1,314.4	48,953,852	6,182	22.0%
WHOLLY	1,815,197	1,381.0	1,314.4	48.953.852	6.182	

Next Largest M	Next Largest MPO (Richmond MPO)	MPO)				
		2000 Census		2006 VDC	2006 VDOT Vehicle Miles Traveled	Traveled
		Population		Vehicle Miles		% of State
	Population	Density	Land Area	Traveled	Lane Miles	VMT
TOTAL	865,941	405.7	2,134.6	30,220,026	6,334.8	13.6%
WHOLLY	546,410	708.9	770.8	17,741,843	3,295.6	8.0%

The Need for Change

- \$4 a gallon gasoline
- VTrans 2025, the official long-range transportation plan of the Commonwealth, called for a greater emphasis on transit and rail investments in its 2004 final report to the General Assembly
 - The transit and rail share of transportation revenues has risen from 5% in fiscal year 1999 to 18% in fiscal year 2009
 - However, increasing ridership and fuel costs have absorbed most of these funding increases
- Metrorail ridership is at an all-time high, with daily ridership exceeding 800,000 on three days in June alone
- Virginia Railway Express June ridership increased 10.7% over June the previous year
- Hampton Roads Transit commuter express ridership increased 32% in the last four months compared with the same period last year
- Greater Richmond Transit Company commuter express May ridership on its Chesterfield routes increased 55% over May the previous year
- Fredericksburg Regional Transit (FRED) April ridership increased 41% over April ridership the previous year
- Undoubtedly, better land uses are part of the long term solution. Recent bipartisan improvements include:
 - Focus economic development around rail, transit, ports and airports
 - o Better regional planning in Hampton Roads and Northern Virginia through regional land use and transportation performance measures
 - State and local planning tools such as traffic impact analysis, road impact fees, access management standards, transfer of development rights, cluster zoning and revised subdivision street requirements



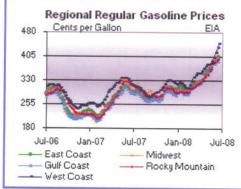
Home > Petroleum > Gasoline and Diesel Fuel Update

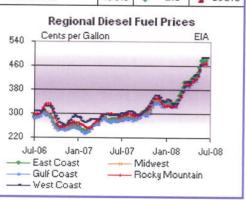
Gasoline and Diesel Fuel Update

Gasoline Diesel

U.S. Gasoline and Diesel Fuel Prices, 06/16/08 U.S. Regular Gasoline Prices U.S. On-Highway Diesel Fuel Prices Cents per Gallon 440 Cents per Gallon 520 380 445 320 370 260 295 200 220 Jul Oct Jan Apr Jul Oct Jan Apr Jul 2006-07 2007-08 2006-07 2007-08 Gasoline (Cents per Gallon) Diesel Fuel (Cents per Gallon)

06/16/08			Chang	e fro	om	06/16/08			Chang	e fro	om
	Price	Wee	ek Ago	Ye	ar Ago		Price	Wee	ek Ago	Ye	ar Ago
U.S.	408.2	1	4.3	1	107.3	U.S.	469.2		0.0	1	188.7
East Coast	405.2	1	3.3	1	107.6	East Coast	475.2	1	0.9	1	195.2
New England	413.1	1	4.2	1	111.1	New England	485.3	1	1.9	1	197.6
Central Atlantic	410.3	1	4.5	1	108.9	Central Atlantic	487.4	4	-0.5	1	200.5
Lower Atlantic	399.0	1	2.1	1	105.6	Lower Atlantic	469.0	1	1.3	1	192.6
Midwest	399.7	1	1.5	1	101.3	Midwest	461.8	1	0.3	1	184.4
Gulf Coast	393.7	1	2.8	1	103.4	Gulf Coast	465.6	4	-0.2	1	190.3
Rocky Mountain	399.4	1	5.3	1	81.3	Rocky Mountain	468.5	1	-1.3	1	177.8
West Coast	445.2	1	12.7	1	126.4	West Coast	485.2	4	-2.2	1	189.4
California	458.8	1	15.5	1	135.2	California	496.9	4	-2.3	1	193.6

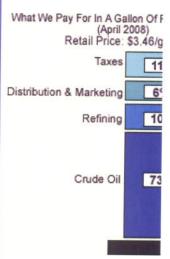




Glossary

Release Schedule Sign Up for Email Upd

History



Explanatio Gasoline Purr

What We Pay For In A Gallor (April 2008)
Retail Price: \$4.08/g
Taxes 11'
Distribution & Marketing 7'
Refining 21

Crude Oil 61

Explanation Diesel Fuel Purr

Retail Gasoline Prices 24-hour hotline: 202-586-6966

On-Highway Diesel Prices 24-hour hotline: 202-586-6966

A Primer on Gasoline Prices

This Week In Petroleum

Short-Term Energy Outlook

Real Petroleum Prices

Does EIA calculate diesel fuel surcharges?

Ethanol, Gasoline, and Ul Sulfur Diesel Supply Issu

Eliminating MTBE in Gas 2006

Can U.S. Supply Accomn Shifts to Diesel-Fueled Li

Table 5.24 Retail Motor Gasoline and On-Highway Diesel Fuel Prices, Selected Years, 1949-2006

(Dollars per Gallon)

		Motor Gaso	Motor Gasoline by Grade				Regular M	Regular Motor Gasoline by Area Type	Type
Leaded Regular	Unleaded Regular	Regular	Unleaded Premium	Premium	All G	Grades	Conventional Gasoline Areas 1.2	Reformulated Gasoline Areas 3.4	All Areas
Year Nominal 5 Real 6	Nominal 5	Real 6	Nominal 5	Real 6	Nominal ⁵	Real 6	Nominal ⁵	Nominal ⁵	Nominal 5
0.27		NA	NIA	NIA	NIA	414			
		Z	N 3	N 3		N N	N	2 2	
.29		NA	NA	N 5	N N	NIN	NA	NA	
.31		NA.	NA	N 5	N	NIN NIN	AN	NA	
.31		N :	NA.	Z	2 3	NIA	NA NA	Z Z	
.36		N.	NA.	NA	N S	NA	NA	NA	
.36		NA.	NA.	NA	NA	NA	VIN	NA	
.36		N.	N S	Z	Z	N N	Z Z	ZZ	
.39		×.	NA	NA.	NA	NA S	NA	NA	
.53		NA.	NA	N 3	ZZ	AN	NA NA	NA	
	9 NA	Z,	Z.	Z	Z	Z	2 3	Z Z	
.59		1.53	NA.	N.	NA	N S	N S	NA	
.62		1.53	N	N.	N.	NA.	NA	NA	
.63		1.46	NA	N	.65	1.43	N.	NA.	
.86		1.82	NA	NA	.88	1.78	NA :	NA.	
1.19		2.30	NA	A	1.22	2.26	A	NA :	NA.
1.31		2.33	1.47	2.49	1.35	2.29	N :	N :	
1.22		2.07	1.42	2.26	1.28	2.04	K	NA :	
1.16		1.90	1.38	2.12	1.23	1.88	NA	N	
1.13		1.79	1.37	2.02	1.20	1.77	NA	NA	
35.		1.72	1.34	1.92	1.20	1.72	NA	NA	
. 90		1.30	1.09	1.52	92.	3	Z N	NA	
.90		1.25	1.11	1 46	9.00	1 27		NA	
1.00		1.30	1.20	1.52	1.06	1 35	N	NA	
1.15		1.43	1.35	1.65	1.22	1.49	Z	Z	
NA		1.35	1.32	1.56	1.20	1.42	1 10	NA	
NA		1.31	1.32	1.52	1.19	1.38	1.09	NA S	
NA		1.25	1.30	1.47	1.17	1.33	21.07	N S	
NA		1.23	1.31	1.45	1.17	1.30	21.07	NA	
Z	1.15	1.25	1.34	1.45	1.21	1.31	21.10	41.16	
Z Z		1.31	1.41	1.51	1.29	1.37	21.19	41.28	
NA		1.29	1.42	1.48	1.29	1.35	21.19	41.25	1.20
Z		1.10	1.25	1.30	1.12	1.16	21.02	41.08	1.03
Z		1.19	1.36	1.39	1.22	1.25	21.12	41.20	
NA		1.51	1.69	1.69	1.56	1.56	21.46	41.54	1 48
NA		1.43	1.66	1.62	1.53	1.50	1.38	1.50	1.42
Z		1.30	1.56	1.49	1.44	1.38	1.31	1.41	35
NA		1.50	1.78	1.67	1.64	1.54	1.52	1.66	
NA		1.72	2.07	R1.89	1.92	1.76	181	1 94	
N		RS OA	5	R2.21	234	R3 07	200	234	2 27
2005 NA NA NA		10.0	2.49		0.01	10.7	1	10.0	

Protection Agency that require the use of reformulated gasoline.

⁴ For 1995-2000, data collected for combined oxygenated and reformulated areas are included in Any area that does not require the sale of reformulated gasoline.
 For 1993-2000, data collected for oxygenated areas are included in "Conventional Gasoline Areas."
 "Reformulated Gasoline Areas" are ozone nonattainment areas designated by the Environmental

[&]quot;Reformulated Gasoline Areas."

5 See "Nominal Dollars" in Glossary.

6 In chained (2000) dollars, calculated by using gross domestic product implicit price deflators in Table D1. See "Chained Dollars" in Glossary.

R=Revised. NA=Not available.

Note: See "Motor Gasoline Grades," "Motor Gasoline, Conventional," "Motor Gasoline, Oxygenated," and "Motor Gasoline, Reformulated" in Glossary.

Web Pages:

For all data beginning in 1949, see http://www.eia.doe.gov/emeu/aer/petro.html.

[•] For related information, see http://www.eia.doe.gov/oil_gas/petroleum/info_glance/petroleum.html Sources: Motor Gasoline by Grade: • 1949-1973—Platt's Oil Price Handbook and Oilmanac, 1974, 51st Edition. • 1974 forward—Energy Information Administration (EIA), annual averages of monthly data from the U.S. Department of Labor, Bureau of Labor Statistics, U.S. City Average Gasoline Prices, Regular Motor Gasoline by Area Type: EIA, weighted annual averages of data from "Weekly U.S. Retail Gasoline Prices, Regular Grade." On-Highway Diesel Fuel: EIA, weighted annual averages of data from "Weekly Retail On-Highway Diesel Prices."



AMERICAN PUBLIC TRANSPORTATION ASSOCIATION



MY APTA

June 22, 2008

APTA Search:

GO

WHAT'S NEW

APTA > Media Center

ABOUT APTA

FOR MEMBERS

COMMITTEES

CONFERENCES &

SERVICES & PROGRAMS

GOVERNMENT AFFAIRS

INDUSTRY

STANDARDS

MEDIA CENTER

E-BUSINESS

PASSENGER TRANSPORT

BOOK STORE

LINKS

CONTACT US

SITE MAP

HOME



Public Transportation Facts

Working on a news story about public transportation? An overview of key facts for the news media is within quick and easy reach. Here is a sample.

- Public Transportation Industry Overview
- Public Transportation Increasing Ridership
- Public Transportation Reduces Gasoline Consumption
- Public Transportation Reduces Greenhouse Gases and Conserves Energy
- Public Transportation Enhances Personal Opportunities
- Public Transportation Saves Money
- Public Transportation Provides Economic Opportunity
- Public Transportation Eases Traffic Congestion
- Public Transportation Offers Increased Mobility Options
- Public Transportation Creates Community Benefits
- Public Transportation Impacts Urban and Rural Communities
- Public Transportation Improves Air Quality
- Public Transportation Fosters Healthy Lifestyles
- Public Transportation Provides Safety and Security

Public Transportation Industry Overview:

- Public transportation consists of a variety of services including: buses, trolleys and light rail, commuter trains, streetcars, cable cars, van pool services, paratransit services for senior citizens and people with disabilities, ferries and water taxies, and monorails and tramways.
- 2. There are more than 6,500 providers of public and community

- transportation offering Americans the opportunity and the choice to travel by means other than a car.
- 3. Approximately 1,500 agencies provide bus service, 5,760 provide paratransit services and 200 provide rail services as well as other modes of public transportation.
- 4. Public transportation is a \$44 billion industry that employs more than 360,000 people.

Public Transportation Increasing Ridership:

- 1. In 2007, Americans took 10.3 billion trips on public transportation the highest ridership level in 50 years.
- 2. 34 million times each weekday, people board public transportation.
- 3. Since 1995 public transportation ridership is up 32 percent.

Public Transportation Reduces Gasoline Consumption:

- Each year, public transportation use in the U.S. saves 1.4 billion gallons of gasoline. This represents almost 4 million gallons of gasoline per day.
- 2. The "leverage effect" of public transportation, supporting transportation efficient land use patterns, saves 4.2 billion gallons of gasoline more than three times the amount of gasoline refined from the oil we import from Kuwait.
- Each year, public transportation use saves the equivalent of 34 supertankers of oil, or a supertanker leaving the Middle East every 11 days.
- Each year, public transportation use save the equivalent of 140,769 service station tanker truck trips clogging our streets each year.
- 5. Public transportation use saves the equivalent of 300,000 fewer automobile fill-ups every day.
- 6. The typical public transit rider consumes on average one half of the oil consumed by an automobile rider.

Public Transportation Reduces Greenhouse Gases and Conserves Energy:

 The "leverage effect" of public transportation reduces the nation's carbon emissions by 37 million metric tons annually – equivalent to the electricity used by 4.9 million households. To achieve similar reduction in carbon emissions, every household in New York City, Washington, DC, Atlanta, Denver and Los Angeles combines would have to completely stop using electricity.

 People living in households within one-quarter mile of rail and one-tenth of a mile from a bus stop drive approximately 4,400 fewer miles annually as compared to persons in similar households with no access to public transit. This equates to an individual household reduction of 223 gallons of gasoline a year.

Public Transportation Enhances Personal Opportunities:

- Public transportation provides personal mobility and freedom for people form every walk of life.
- 2. Public transportation provides access to job opportunities for million of Americans as well as a transportation option to get to work, go to school, visit friends, or go to a doctor's office.

Public Transportation Saves Money

- The average household spends 18 cents on transportation, and 94 percent of this goes to buying, maintaining and operating cars.
- Public transportation provides an affordable, and for many, necessary alternative to driving.
- 3. Americans living in areas served by public transportation save \$18 billion annually in congestion costs.
- 4. Transit availability can reduce the need for an additional car, a yearly expense of \$6,251 in a household budget.

Public Transportation Provides Economic Opportunity:

- 1. Every \$1 invested in public transportation projects generates approximately \$6 in local economic activity.
- 2. Every \$10 million in capital investment in public transportation yields \$30 million in increased business sales.
- 3. Every \$10 million in operating investment in public transportation yields \$32 million in increased business sales.
- Real estate -- residential, commercial or business -- that is served by public transportation is valued more highly by the public than similar properties not as well served by transit.

 Public transportation enhances local rural economic growth in many ways, increasing the local customer base for a range of services -- shopping malls, restaurants, medical facilities and other transportation services.

Public Transportation Eases Traffic Congestion:

- According to the most recent Texas Transportation Institute (TTI) report on congestion in 2005, public transportation saved travelers 541 million hours in travel time and 340 million gallons of fuel.
- 2. Without public transportation, congestion costs would have been an additional \$10.2 billion.
- If public transit systems had never existed in American cities and their effects on our urban landscapes were completely erased, American households would drive 102.2 billion more miles per year.

Public Transportation Offers Increased Mobility Options:

- Largely because of limited transportation options, more than 50 percent of all non-drivers age 65 and older or 3.6 million Americans stay at home on any given day partially because they lack transportation options.
- Compared with older drivers, older non-drivers in the US make 15 percent fewer trips to the doctor, 59 percent fewer shopping trips and visits to restaurants, and 65 percent fewer trips for social, family and religious activities.
- 3. By 2025, an estimated 20 percent of the population -- one in five persons -- will be over age 65. Providing mobility options is critical for older Americans and for those who care for them.
- According to a national survey of individuals age 65 or older, conducted by Harris Interactive in November 2005, more than four in five seniors believe public transportation is a better alternative to driving alone, especially at night.
- 5. 83 percent of older Americans agree that public transit provides easy access to the things that they need in everyday life.
- At the 2005 White House Conference on Aging, ensuring that older Americans have transportation options to retain their mobility and independence received the third most votes of 73 issues considered, with 1,002 ballots out of a maximum of 1,200.
- 7. Public transportation systems provide a vital link to the more than 51 million Americans with disabilities.

Public Transportation Creates Community Benefits:

- Public transportation foster transit orientated development that provides convenient access to public transportation and integration of transit in the community.
- Public transportation encourages land-use programs that generate synergies and create a range of housing types, from single-family homes to apartments, to accommodate diverse incomes and family structures.
- Public transportation revitalizes neighborhoods, increases social interaction and pedestrian activity, enhances safety, and helps create a sense of "place" that will help make a community unique and special.
- 4. Public transportation generates a financial return for communities and businesses as well as individual and collective savings that can be captured and invested in housing or amenities rather than transportation, parking and autoorientated infrastructure.
- 5. When commuters ride public transportation or walk, contact with neighbors tends to increase, ultimately helping to bring a community together.

Public Transportation Impacts Urban and Rural Communities:

- Public transportation encourages economic and social activities and helps create strong neighborhood centers that are economically stable, safe and productive.
- Approximately 12 percent of public transportation users are en route to schools. Educators and concerned parents rely on expanded public transportation services.
- 3. Public transportation offers mobility for residents of rural America, particularly for those without cars. From 2002 through 2005, ridership for small urban and rural public transportation systems jumped nearly 20 percent.
- 4. Two-thirds of rural Americans -- 60 million people -- are almost wholly unserved by public transportation. They live in counties that have either no service or so little service that they can only be characterized as isolated.

Public Transportation Improves Air Quality:

- 1. Public transportation reduces pollution and helps promote cleaner air.
- 2. Public transportation produces 95 percent less carbon monoxide

- (CO), 90 percent less in volatile organic compounds (VOCs), and about half as much carbon dioxide (CO2) and nitrogen oxide (NOx), per passenger mile, as private vehicles. Energy-related carbon dioxide emissions represent 82 percent of total US human-made greenhouse emissions.
- By reducing smog-producing pollutants, greenhouse gases and by conserving ecologically sensitive lands and open spaces -public transportation is helping to meet national air quality standards.

Public Transportation Fosters Healthy Lifestyles:

- Public transportation fosters a more active lifestyle, encouraging more people to walk, bike and jog to transit stops. An analysis of 2001 National Household Travel Survey data for transit users finds that walking to and from transit helps inactive persons attain a significant portion of the recommended minimum daily exercise they need.
- Transportation is an integral part of health or social services programs. Operators of these programs rely on public transit to reach the intended target groups, and to assure access and opportunity for all Americans.

Public Transportation Provides Safety and Security:

- 1. In major evacuations of urban areas, only public transportation has the capacity to move millions of people quickly and to give critical support to first responders by delivering emergency equipment and transporting emergency response personnel. The 9/11 response illustrates public transit's vital role.
- When Americans face natural or man-made disasters, America's public transportation systems provide comfort, safety, security and rescue.

For more public transportation facts click here.

Some of these pages may include links to documents in the Adobe PDF format. Please download the Adobe PDF reader if you have not already done so.



Copyright © 2003 American Public Transportation Association • 1666 K Street NW, Washington, DC 20006

Telephone (202) 496-4800 • Fax (202) 496-4321 • Logo Usage

Summary of Governor Kaine's Transportation Plan

- Statewide and regional revenues
 - o Highway Maintenance and Operating Fund
 - Regional congestion relief funds in Hampton Roads and Northern Virginia
 - o Transportation Change Fund
- District by district impacts of Governor Kaine's plan

Governor Kaine's 2008 Transportation Plan

Stat	tewide Main	tenance Fu	ınding			
	FY09	FY10	FY11	FY12	FY13	FY14
(phased 1/2% in January 2009 and in July 2009)	39.2	184.4	195.1	202.6	212.7	212.0
\$10 Annual Registration Fee	72.5	76.2	76.4	76.8	77.2	77.4
Rededicate existing 1% Motor Vehicle Sales and Use Tax to Highway Maintenance (other 2% already dedicated)	188.2	192.5	195.1	202.6	212.7	212.0
Rededicate Existing \$35 Minimal Motor Vehicle Sales and Use Tax to Highway Maintenance*	14.3	14.5	14.7	15.1	15.6	15.5
Total Funding Dedicated to Highway Maintenance	\$ 314.2	\$ 467.6	\$ 481.3	\$ 497.1	\$ 518.2	\$ 516.9

Re	giona	I North	ern	Virginia	Fur	nding				
		FY09		FY10		FY11	- 4	FY12	FY13	FY14
1% Retail Sales and Use Tax	\$	306.3	\$	351.1	\$	368.3	\$	384.2	\$ 400.3	\$ 414.3
- Local Projects 40%						/irginia F				nde

Regi	ion	al Hamp	ton	Roads	-ur	iding					
		FY09		FY10		FY11		FY12		FY13	FY14
1% Retail Sales and Use Tax	\$	167.9	\$	192.5	\$	201.9	\$	210.6	\$	219.4	\$ 227.1
 I-64 Widening on Peninsula & Southside Midtown/Downtown Tunnel Southeastern Parkway/Dominion Blvd I-664 Widening on Peninsula & Southside 					- H	Third Cro Hampton Route 46	Ro	-	dge	Tunnel	

	Tran	sportati	on (Change	Fun	ıd					
25 Cent Grantor's Tax	\$	142.0	\$	155.0	\$	152.5	\$	152.5	\$ 152.5	\$	155.0
- 65% Transit Capital & Operating					- 4	% Airpo	rts				
- 10% Rail Capital & Operating											

TOTAL NEW TRANSPORTATION FUNDING											
	FY09	FY10	FY11	FY12	FY13	FY14					
	\$ 727.9	\$ 959.2	\$ 994.2	\$ 1,026.7	\$ 1,062.1	\$ 1,085.8					

^{*}Law requires a \$35 tax or the payment of a 3% motor vehicle sales & use tax, whichever is greater

Amount of Regional Sales Tax Paid by Average Individual

FY 2010

Hampton Roads 1% Sales and Use

\$192.5 Million

Paid by Out of State

Travelers

\$17.3 Million

(assumes 9% of total, based on estimate to Sec. Wagner, 5/16/08)

\$57.8 Million

(assumes 30% of total, consistent with estimates for 2002 referendum)

Paid by Individual Virginians

Paid by Businesses

\$117.4 Million

Population of Region 1,577,408

Average Tax per Individual

\$74.44

(includes tax paid by out of region VA travelers and shoppers)

Isle of Wight 2007 Population

63 184	York
	1

	Hampton	Chesapeake	
100 41	145,86	216,56	

235,987	Norfolk
182,478	Newport News
145,862	Hampton
216,568	Chesapeake

Williamsburg	VA Beach	Suffolk	Portsmouth	Poquoson
13,245	433,033	81,209	98,543	11,948

Total	
1,577	
,408	

Amount of Regional Sales Tax Paid by Average Individual

FY 2010

Northern VA 1% Sales and Use

Paid by Out of State Travelers

\$351.1 Million

\$31.6 Million

(assumes 9% of total, based on estimate to Sec. Wagner, 5/16/08)

Paid by Businesses

Paid by Individual

\$105.3 Million

(assumes 30% of total, consistent with estimates for 2002 referendum)

Virginians \$214.2 Million

Population of Region 2,460,749

Average Tax per Individual

\$87.03

(includes tax paid by out of region VA travelers and shoppers)

1	District Name	Bristol

(in thousands)

					(in thousands)			
			Fiscal Year						
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota
nterstate	Bristol	FY 2009-14 WD	16,433	8,017	6,763	25,300	22,914	31,961	111,38
		Governor's Plan	16,433	8,017	6,763	25,300	22,914	31,961	111,38
		Differences	0	0	0	0	0	0	
Primary	Bristol	FY 2009-14 WD	10,151	10,516	10,349	9,289	9,032	6,578	55,91
6.0-0.04.04(-)(d.0 ¹ 0)	0.0000000000000000000000000000000000000	Governor's Plan	21,409	22,733	22,551	21,998	22,337	18,895	129,92
		Differences	11,258	12,218	12,202	12,709	13,305	12,316	74,00
	Other Project F	unding to District	58,237	64,180	61,091	58,077	61,448	60,226	363,260
Secondary	Bland	FY 2009-14 WD	408	391	390	380	375	324	2,268
		Governor's Plan	698	707	709	711	719	669	4,21
		Differences	290	316	319	331	344	345	1,94
	Buchanan	FY 2009-14 WD	1,250	1,210	1,208	1,188	1,179	1,049	7,08
	Duchanan	Governor's Plan	1,984	2,009	2,014		1,000,000,000	1,922	12,002
	1	Differences	733	799	806	2,025 836	2,049 870	873	4,917
		Towner division	1	700			0,0	0,0	1 4,011
	Dickenson	FY 2009-14 WD	757	733	730	724	717	639	4,300
		Governor's Plan	1,172	1,186	1,187	1,198	1,210	1,134	7,08
	-	Differences	416	453	457	474	493	495	2,788
	Grayson	FY 2009-14 WD	1,050	1,008	1,019	955	954	822	5,80
	8	Governor's Plan	1,944	1,982	2,000	1,973	2,014	1,887	11,799
		Differences	893	974	981	1,018	1,060	1,065	5,99
	Lee	FY 2009-14 WD	1,210	1,168	1,172	1,132	1,125	989	6,79
	1	Governor's Plan	2,041	2,074	2,085	2,079	2,111	1,979	12,369
		Differences	831	905	913	947	986	990	5,572
	Duncell	TEV 2000 44 MD	4 202	4 244	4.054	4.000	4.000	4 422	7.00
	Russell	FY 2009-14 WD	1,393	1,344	1,351	1,296	1,290	1,132	7,800
		Governor's Plan	2,392	2,433	2,449	2,436	2,477	2,324	14,51
		Differences	1,000	1,090	1,098	1,140	1,187	1,191	6,70
	Scott	FY 2009-14 WD	1,313	1,264	1,271	1,213	1,207	1,048	7,316
		Governor's Plan	2,322	2,363	2,379	2,362	2,403	2,250	14,079
		Differences	1,009	1,099	1,108	1,150	1,197	1,202	6,763
	Smyth	FY 2009-14 WD	1,089	1,058	1,057	1,044	1,036	930	6.21-
		Governor's Plan	4,682	1,704	1,708	1,720	1,739	1,636	10,190
		Differences	593	646	652	676	704	706	3,976
	Tazewell	FY 2009-14 WD	1,366	1,325	1,323	1,309	1,299	1,165	7,78
	TOLOWGII	Governor's Plan	2,100	2,125	2,129	2,146	2,169	2,039	12,709
		Differences	734	799	807	837	871	874	4,92
	Machinetes	FY 2009-14 WD	1.070	4.044	4.04F	4 000	4 000	1 674	44.04
	Washington	Governor's Plan	1,970 3,104	1,914 3,148	1,915 3,159	1,880 3,172	1,868	1,671 3,020	11,219 18,819
		Differences	1,133	1,234	1,245	1,292	3,212 1,344	1,349	7,596
	Wise	FY 2009-14 WD	1,292	1,261	1,254	1,263	1,251	1,139	7,46
		Governor's Plan	1,840	1,858	1,856	1,889	1,901	1,791	11,13
		Differences	548	597	602	626	650	652	3,67

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

District Name Bristol

(in thousands)

		(in thousands)							
S 4	I analita	1./	Fiscal Year	FY 2010 ²	EV 2044	EV 2040	EV 2042	EV 2044	Cond Tel
System	Locality	Version	FY 2009 ¹		FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota
	Wythe	FY 2009-14 WD	1,070	1,031	1,038	990	986	860	5,97
	1. 1	Governor's Plan	1,879	1,913	1,927	1,912	1,946	1,824	11,40
		Differences	809	882	889	922	960	964	5,42
	Total All Localities	FY 2009-14 WD	14,167	13,710	13,728	13,375	13,285	11,769	80,03
		Governor's Plan	23,157	23,502	23,603	23,623	23,951	22,474	140,31
		Differences	8,990	9,792	9,875	10,249	10,666	10,705	60,27
	Other Project Fund	ing to District	0	3,945	4,559	7,953	4,274	3,247	23,97
		IEV 2000 44 14/D	070	250	254	257	250	204	2.40
Irban	Abingdon	FY 2009-14 WD Governor's Plan	378 593	359 593	354 590	357 602	350 605	304 560	2,10 3,54
		Differences	215	234	237	246	255	256	1,44
		Differences	210	204	201	240	200	200	1
	Big Stone Gap	FY 2009-14 WD	257	243	239	241	236	203	1,41
		Governor's Plan	411	411	409	417	419	386	2,45
		Differences	155	168	170	176	183	184	1,03
	Bluefield	FY 2009-14 WD	248	235	232	234	229	199	1,37
	Didelicia	Governor's Plan	390	390	388	396	398	368	2,32
		Differences	142	154	156	162	168	169	95
		1=			700	700	770	070	100
	Bristol	FY 2009-14 WD	834	793	782	788	773	672	4,64
		Governor's Plan	1,306	1,306	1,301	1,326	1,333	1,233	7,80
	-	Differences	472	513	519	538	560	561	3,16
	Lebanon	FY 2009-14 WD	155	147	145	147	144	125	86
		Governor's Plan	242	242	241	246	247	229	1,44
		Differences	87	94	95	99	103	103	58
	Marion	TFY 2009-14 WD	299	284	280	282	277	242	1,66
	Iviarion	Governor's Plan	465	465	463	472	475	440	2,77
		Differences	166	181	183	190	197	198	1,11
		-							
	Norton	FY 2009-14 WD	184	175	172	174	171	149	1,02
		Governor's Plan	286	286	285	290	292	270	1,70
		Differences	102	111	112	117	121	122	68
	Richlands	FY 2009-14 WD	239	226	222	224	218	186	1,31
		Governor's Pian	391	391	389	396	398	366	2,33
		Differences	152	165	167	173	180	180	1,01
	Saltville	FY 2009-14 WD	108	102	101	101	99	86	59
	Caltville	Governor's Plan	169	168	168	171	172	159	1,00
		Differences	61	66	67	70	72	73	
		I				10-	16:	100	1
	Tazewell	FY 2009-14 WD	207	196	194	195	191	166	10
		Governor's Plan Differences	325 119	326 129	324 131	331 136	332 141	307 141	1,94
		Differences	113	123	101	100	171	.41	1
	Wise	FY 2009-14 WD	156	149	147	148	145	126	2002
		Governor's Plan	245	245	244	249	250	231	
		Differences	88	96	97	101	105	105	5

2

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

Virginia Department of Transportation and Virginia Rail and Public Transportation Comparison of State Formula Allocations Planned in the Working Draft FY 2009 - 2014 Plan and Governor's FY 2009 - 2014 Plan

All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

1	District Name	Bristol

(in thousands)

						(III tillousarius)	E		
			Fiscal Year						
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
	Wytheville	FY 2009-14 WD	384	364	359	362	355	308	2,132
		Governor's Plan	805	505	602	614	617	570	3,612
		Differences	221	240	243	252	262	262	1,480
	Total All Localities	FY 2009-14 WD	3,446	3,273	3,228	3,252	3,190	2,765	19,153
		Governor's Plan	5,426	5,426	5,403	5,510	5,537	5,118	32,421
		Differences	1,980	2,154	2,175	2,259	2,347	2,353	13,268
	Other Project Fund	ing to District	360	546	271	138	1,246	307	2,868
All Highway		1	1						
Systems	Total All Localities	FY 2009-14 WD	102,795	104,187	99,989	117,384	115,388	116,853	656,596
		Governor's Plan	125,023	128,350	124,241	142,600	141,707	142,228	804,149
y		Differences	22,228	24,164	24,252	25,216	26,319	25,375	147,553
Transit	Operating	FY 2009-14 WD	999	1,041	1,068	1,097	1,131	1,154	6,490
		Governor's Plan	1,366	1,487	1,503	1,526	1,551	1,585	9,018
		Differences	367	446	435	429	420	431	2,528
	Capital	FY 2009-14 WD	204	206	165	212	215	217	1,219
		Governor's Plan	239	248	206	252	254	257	1,456
		Differences	35	42	41	40	39	40	237
	Total	FY 2009-14 WD	1,203	1,247	1,233	1,309	1,346	1,371	7,709
	1	Governor's Plan	1,605	1,735	1,709	1,778	1,805	1,842	10,474
		Differences	402	488	476	469	459	471	2,765
Total Highway Construction and									
Transit	Total All Localities	FY 2009-14 WD	103,998	105.434	101,222	118,693	116,734	118,224	664,305
		Governor's Plan	126,628	130,085	125,950	144,378	143,512	144,070	
	}	Differences	22,630	24,652	24,728	25,685	26,778	25,846	150,318

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session

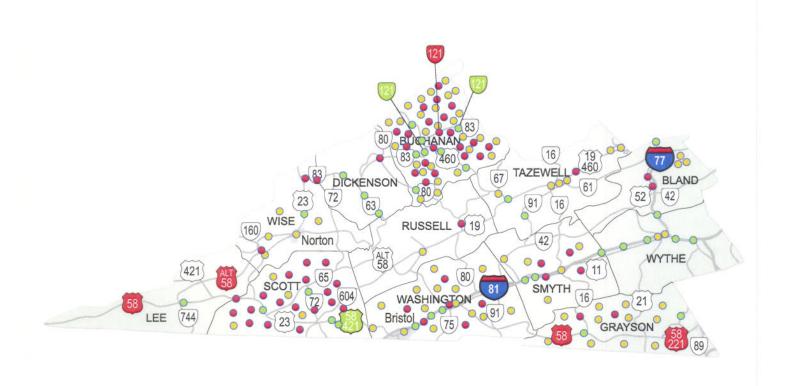
will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.



BRISTOL DISTRICT

DRAFT FY09-14 SIX-YEAR IMPROVEMENT PROGRAM





LEGEND



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program

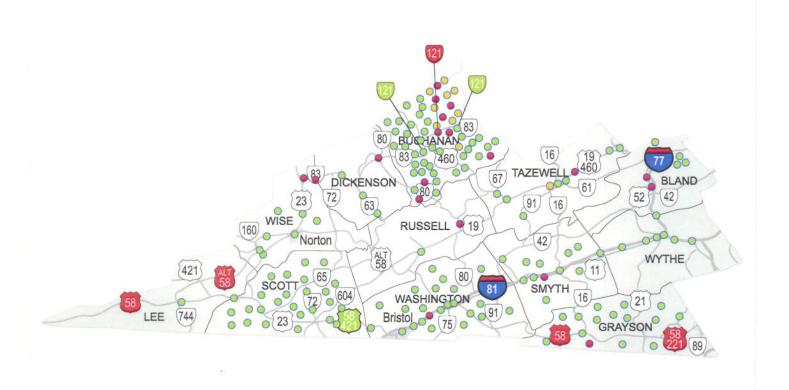


Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



BRISTOL DISTRICT

PROJECT BENEFITS OF GOVERNOR KAINE'S TRANSPORTATION PROPOSAL





LEGEND



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six-Year Improvement Program District Name Culpeper

1:-	44		-1-
(III	thou	ısan	ns

						in thousands)			
			Fiscal Year						
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota
nterstate	Culpeper	FY 2009-14 WD	0	300	300	3,620	300	1,812	6,33
		Governor's Plan	0	300	300	3,620	300	1,812	6,33
		Differences	0	0	0	0	0	0	
Primary	Culpeper	FY 2009-14 WD	9,584	8,671	8,477	8,530	8,423	5,984	49,66
· iiii a y	Оспророг	Governor's Plan	18,683	18,675	18,471	18,861	19,239	16,948	110,87
		Differences	9,099	10,004	9,995	10,332	10,817	10,964	61,21
	Other Project Fun	ding to District	6,847	9,022	5,758	4,240	7,013	1,329	34,21
			1						
Secondary	Albemarle	FY 2009-14 WD	3,564	3,474	3,465	3,435	3,406	3,061	20,40
		Governor's Plan	5,438	5,514	5,523	5,572	5,628	5,290	32,96
		Differences	1,874	2,040	2,058	2,136	2,222	2,229	12,56
	Culpeper	FY 2009-14 WD	1,323	1,281	1,280	1,248	1,236	1,085	7,45
	1	Governor's Plan	2,196	2,232	2,240	2,243	2,272	2,125	13,30
		Differences	873	951	959	996	1,036	1,040	5,85
	Foundier	FY 2009-14 WD	2,337	2,269	2,265	2,228	2,208	1,964	13,27
	Fauquier		000000000000000000000000000000000000000			100			22,49
		Governor's Plan Differences	3,712 1,375	3,767 1,498	3,776 1,511	3,796 1,568	3,840 1,632	3,601 1,637	9,22
	Fluvanna	FY 2009-14 WD	977	950	944	940	929	827	5,56
		Governor's Plan	1,506	1,525	1,525	1,542	1,555	1,455	9,10
		Differences	528	575	580	602	626	628	3,54
	Greene	FY 2009-14 WD	681	664	663	656	651	586	3,90
	0.000	Governor's Plan	1,040	1,054	1,056	1,065	1,076	1,012	6,30
		Differences	358	390	394	409	425	426	2,40
		TEV 2000 44 14/D	4 200	4.004	4.054	1.040	4 007	1 004	7,37
	Louisa	FY 2009-14 WD	1,302	1,261	1,254	1,242	1,227	1,084	
		Governor's Plan	2,057	2,084	2,084	2,104	2,124	1,983	12,43
		Differences	756	823	830	862	897	899	5,06
	Madison	FY 2009-14 WD	676	653	653	633	628	549	3,79
		Governor's Plan	1,141	1,158	1,163	1,163	1,179	1,102	6,90
		Differences	464	506	510	529	551	553	3,11
	Orange	FY 2009-14 WD	1,114	1,080	1,077	1,059	1,048	926	0.30
	Orango	Governor's Plan	1,788	1,814	1,818	1,828	1,849	1,729	10,82
		Differences	675	734	741	769	800	803	4,52
		I			101	101	200	0.14	0.44
	Rappahannock	FY 2009-14 WD	437	419	421	401	398	341	2,41
		Governor's Plan	792	806	810	805	819	763	4,79
		Differences	355	387	390	404	421	423	2,37
	Total All Localities	FY 2009-14 WD	12,412	12,052	12,022	11,842	11,732	10,422	70,48
		Governor's Plan	19,670	19,955	19,995	20,118	20,342	19,061	119,14
		Differences	7,258	7,903	7,973	8,276	8,610	8,639	48,65
	Other Project Free	ding to District	-	2.740	1 000	1 004	1,798	2,007	10.43
	Other Project Fun	aing to District	0	2,749	1,988	1,884	1,798	2,007	10,42

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session

will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

VIII.		
District Name	Culpeper	

(in thousands)

						iii tiiousaiius)			
			Fiscal Year	3					
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
Jrban	Charlottesville	FY 2009-14 WD	2,056	1,957	1,933	1,949	1,915	1,677	11,488
		Governor's Plan	3,176	3,176	3,164	3,227	3,243	3,008	18,994
		Differences	1,120	1,218	1,231	1,278	1,328	1,331	7,506
3	Culpeper	FY 2009-14 WD	557	527	518	521	509	433	3,065
		Governor's Plan	910	911	906	924	928	852	5,431
		Differences	353	384	388	403	419	420	2,366
	Orange	FY 2009-14 WD	209	199	196	197	193	167	1,161
		Governor's Plan	332	333	331	338	339	313	1,986
		Differences	123	134	135	140	146	146	825
	Warrenton	FY 2009-14 WD	378	357	351	354	346	294	2,080
		Governor's Plan	615	615	612	624	627	576	3,668
		Differences	237	258	260	270	281	282	1,588
	Total All Localities	TFY 2009-14 WD	3,200	3,040	2,998	3,021	2,963	2,570	17,793
	Total 7 III Loodiitico	Governor's Plan	5,033	5.034	5,013	5,112	5,137	4,749	30,078
		Differences	1,833	1,994	2,014	2,091	2,174	2,179	12,285
	Other Project Funding to District		7,020	1,509	34	34	33	1,012	9,641
All Highway		1	-						
Systems	Total All Localities	FY 2009-14 WD	39,063	37,342	31,577	33,171	32,262	25,137	198,552
o y o to o	Total 7 III Localitico	Governor's Plan	57,253	57,244	51,559	53,870	53,862	46,918	320,707
		Differences	18,191	19,902	19,982	20,699	21,600	21,782	122,155
Transit	Operating	FY 2009-14 WD	2,100	2,188	2,244	2,306	2,377	2,425	13,640
Transit	Operating	Governor's Plan	2,872	3,127	3,159	3,208	3,261	3,332	18,959
		Differences	772	939	915	902	884	907	5,319
	Capital	FY 2009-14 WD	276	279	223	287	291	293	1,649
	Capital	Governor's Plan	323	336	278	341	344	348	1,970
		Differences	47	57	55	54	53	55	32
Total	Total	FY 2009-14 WD	2,376	2,467	2.467	2,593	2,668	2,718	15,289
	Total	Governor's Plan	3,195		3,437	3,549	3,605	3,680	120000000000000000000000000000000000000
		Differences	819	996	970	956	937	962	
Total Highway		1	-						-
Construction and									
Transit	Total All Localities	FY 2009-14 WD	41,439	39,809	34,044	35,764	34,930	27,855	213,84
	, marke enament (1990) 500:	Governor's Plan	60,448	60,707	54,996	57,419	57,467	50,598	341,636
		Differences	19,010	20,898	20,952	21,655	22,537	22,744	127,795

5

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

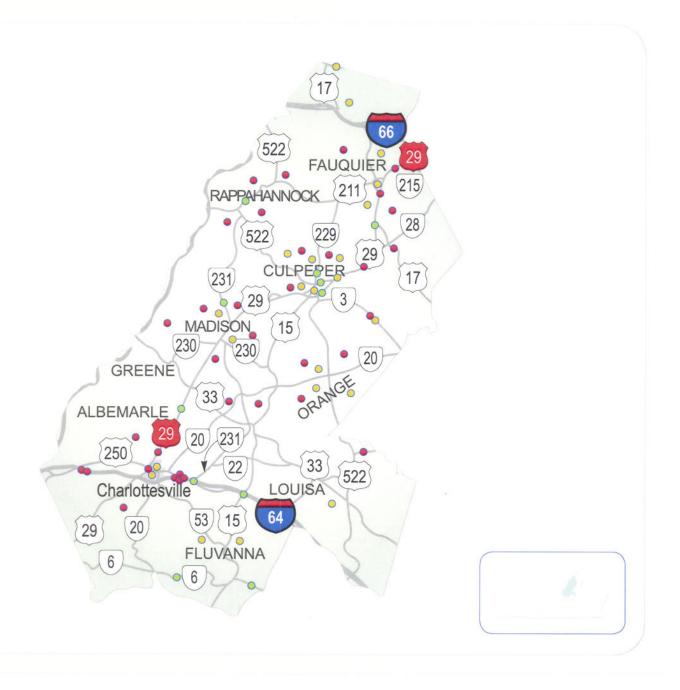
2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality

is expected to be minimal, on average the reductions would be approximately \$30,000.



CULPEPER DISTRICT

DRAFT FY09-14 SIX-YEAR IMPROVEMENT PROGRAM







Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program

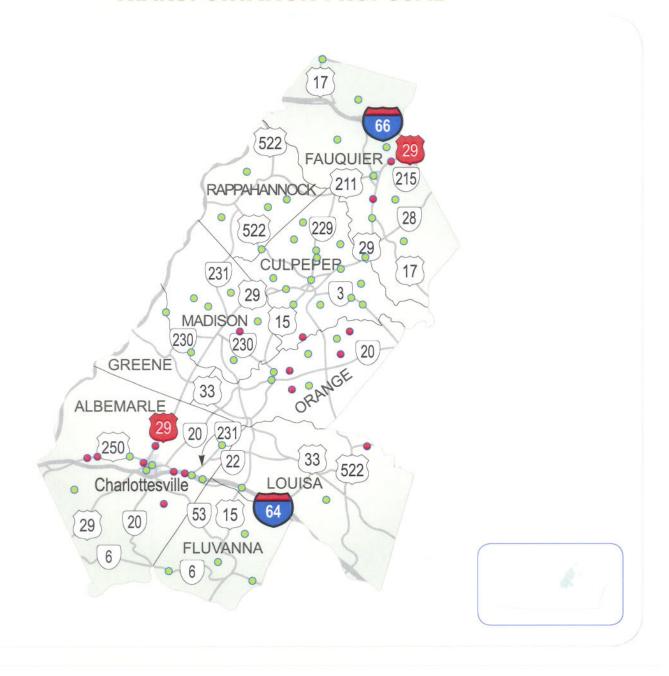


Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



CULPEPER DISTRICT

PROJECT BENEFITS OF GOVERNOR KAINE'S TRANSPORTATION PROPOSAL







Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program

District Name Fredericksburg

(in thousands)

						in thousands)			
			Fiscal Year	-					
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
nterstate	Fredericksburg	FY 2009-14 WD	4,381	3,178	2,300	2,985	12,879	10,879	36,602
		Governor's Plan	4,381	3,178	2,300	2,985	12,879	10,879	36,602
		Differences	0	0	0	0	0	0	
Primary	Fredericksburg	FY 2009-14 WD	11,084	10,143	10,009	9,995	8,765	6,362	56,359
		Governor's Plan	21,851	21,962	21,811	22,201	21,632	19,144	128,600
		Differences	10,767	11,818	11,802	12,206	12,866	12,782	72,241
	Other Project Fun	ding to District	16,975	16,329	3,354	5,901	11,410	23,294	77,264
		3			-17-	-,,,,,,			
Secondary	Caroline	FY 2009-14 WD	1,058	1,028	1,019	1,022	1,008	898	6,032
		Governor's Plan	1,596	1,613	1,610	1,636	1,646	1,537	9,639
		Differences	538	585	591	614	638	640	3,606
		TEV 0000 44110	100	400	470		171	110	0.00
	Essex	FY 2009-14 WD	499	482	479	477	471	416	2,824
		Governor's Plan	777	785	784	794	801	746	4,688
Glou		Differences	278	303	306	317	330	331	1,864
	Gloucester	FY 2009-14 WD	1,387	1,357	1,352	1,355	1,345	1,229	8,025
	Gloucester	Governor's Plan	1,988	2,011	2,013	2,041	2,058	1,943	12,054
		Differences	601	654	660	686	713	715	4,028
		Diliciences	1 001	054	000	000	710	710	4,020
	King & Queen	FY 2009-14 WD	414	397	393	387	381	326	2,299
		Governor's Plan	699	707	706	712	719	665	4,207
		Differences	285	310	313	325	338	339	1,909
	Wi O	TEV 2000 44 IMB	770	700	755	754	740	000	4.400
	King George	FY 2009-14 WD Governor's Plan	779 1,170	760 1,186	755 1,185	754	746 1,210	669 1,135	4,463 7,087
		Differences	391	426	430	1,201 446	464	466	2,624
		12.1107011000	1						
	King William	FY 2009-14 WD	645	626	621	619	611	542	3,665
		Governor's Plan	998	1,010	1,009	1,022	1,030	962	6,031
		Differences	353	384	388	403	419	420	2,366
	Lancaster	FY 2009-14 WD	478	467	464	467	462	419	2,757
	Lancaster		689	696	696	707	712	670	4,170
		Governor's Plan Differences	211	229	232	241	250	251	1,413
		Differences	211	223	202	241	2.00	201	1,410
	Mathews	FY 2009-14 WD	381	372	370	370	367	333	2,194
	Labora - Spiritary	Governor's Plan	55/	564	564	571	576	543	3,375
		Differences	176	192	194	201	209	210	1,181
	8.41.41	TEV 2000 441MD	407	440	444	444	440	270	0.450
	Middlesex	FY 2009-14 WD	427	416	414	414	410	370	2,450
		Governor's Plan	630	637	637	646	651	612	3,813
		Differences	203	221	223	232	241	242	1,363
	Northumberland	TFY 2009-14 WD	539	524	520	524	517	465	3,089
		Governor's Plan	787	794	793	807	812	761	4,753
		Differences	248	270	273	283	294	295	1,664
		1							
	Richmond	FY 2009-14 WD	408	396	393	394	389	347	2,327
		Governor's Plan	613	619	618	628	632	591	3,701
		Differences	205	223	225	234	243	244	1,374
	Castal	ITV 2000 44115	0.001	0.045	0.700	0.00=	0.700	0.110	20.40
	Spotsylvania	FY 2009-14 WD	3,894	3,815	3,793	3,807	3,769	3,419	22,497
		Governor's Plan	5,648	5,723	5,720	5,807	5,848	5,504	34,252
		Differences	1,754	1,908	1,927	2,001	2,080	2,085	11,754

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session

will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

Virginia Department of Transportation and Virginia Rail and Public Transportation Comparison of State Formula Allocations Planned in the Working Draft FY 2009 - 2014 Plan and Governor's FY 2009 - 2014 Plan

All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name Fredericksburg

(in thousands)

			1			iii triousarius)			
			Fiscal Year	2		5180550000000000			
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota
	Stafford	FY 2009-14 WD	3,820	3,750	3,728	3,754	3,718	3,394	22,16
		Governor's Plan	5,413	5,484	5,479	5,572	5,608	5,288	32,84
		Differences	1,594	1,734	1,751	1,818	1,890	1,895	10,682
	Westmoreland	FY 2009-14 WD	715	696	692	693	686	619	4,10
		Governor's Plan	1,052	1,062	1,062	1,078	1,086	1,020	6,36
		Differences	337	367	370	384	400	401	2,25
	Total All Localities	FY 2009-14 WD	15,445	15,084	14,992	15,038	14,879	13,447	88,88
		Governor's Plan	22,620	22,891	22,876	23,222	23,387	21,978	136,97
		Differences	7,175	7,807	7,883	8,184	8,508	8,531	48,08
	Other Project Fund	ing to District	0	1,777	2,305	2,130	1,646	665	8,522
Urban	Fredericksburg	FY 2009-14 WD	1,007	955	940	947	927	797	5,574
Orban	redericksburg	Governor's Plan	1,610	1,611	1,603	1,635	1,642	1,514	9,61
		Differences	603	656	662	688	715	717	4,04
	Total All Localities	FY 2009-14 WD	1,007	955	940	947	927	797	5,57
	Total All Localities	Governor's Plan	1,610	1,611	1,603	1,635	1,642	1,514	9,61
		Differences	603	656	662	688	715	717	4,04
	Other Project Fund	ling to District	13	12	617	193	1,079	2,030	3,94
All Highway			-						-
Systems	Total All Localities	FY 2009-14 WD	48,905	47,477	34,518	37,189	51,586	57,474	277,14
		Governor's Plan	67,449	67,759	54,865	58,267	73,675	79,503	401,51
		Differences	18,545	20,281	20,347	21,078	22,089	22,029	124,37
Transit	Operating	FY 2009-14 WD	921	960	984	1,011	1,042	1,063	5,98
		Governor's Plan	1,259	1,371	1,385	1,407	1,430	1,461	8,31
		Differences	338	411	401	396	388	398	2,33
	Capital	FY 2009-14 WD	771	779	623	800	812	819	4,60
		Governor's Plan	902	937	777	952	961	972	5,50
		Differences	131	158	154	152	149	153	89
	Total	FY 2009-14 WD	1,692	1,739	1,607	1,811	1,854	1,882	10,58
	7.5.550	Governer's Plan	2,161	2,308	2,162	2,359	2,391	2,433	13,81
America (Differences	469	569	555	548	537	551	3,22
Total Highway			1						
Construction and Transit	Total All Localities	FY 2009-14 WD	50,597	49,216	36,125	39,000	53,440	59,356	287,73
		Governor's Plan	69,610	70,067	57,027	60,626	76,066	81,936	060000000000000000000000000000000000000
		Differences	19,014	20,850	20,902	21,626	22,626	22,580	127,59

7

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session

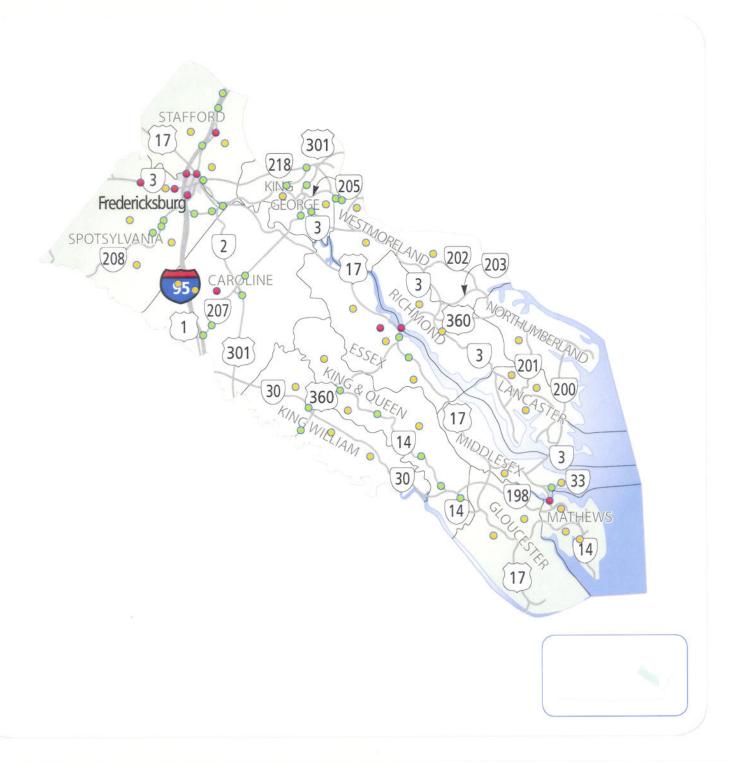
will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.



FREDERICKSBURG DISTRICT

DRAFT FY09-14 SIX-YEAR IMPROVEMENT PROGRAM







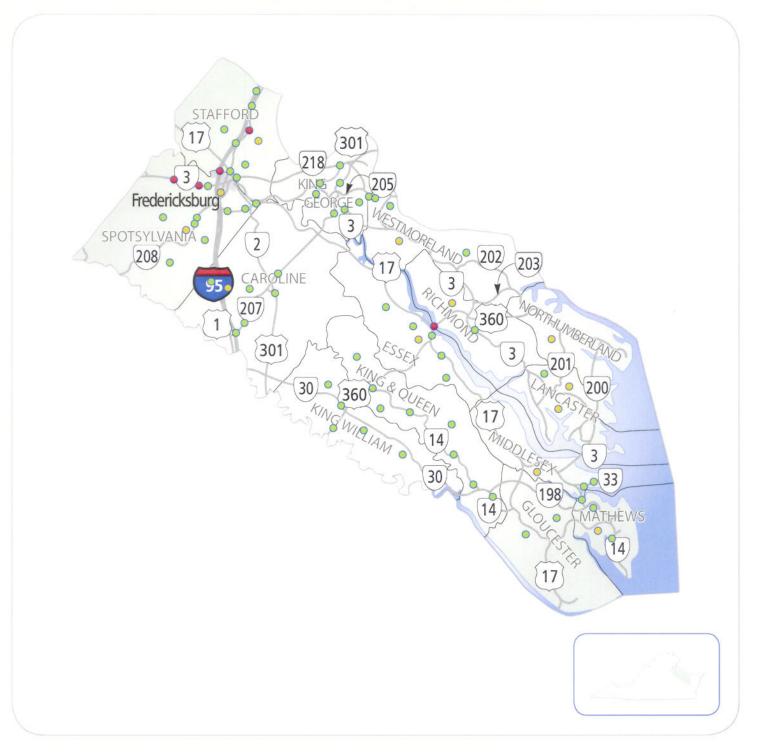






FREDERICKSBURG DISTRICT

PROJECT BENEFITS OF GOVERNOR KAINE'S TRANSPORTATION PROPOSAL











District Name Hampton Roads

(in thousands)

						in thousands)		
	1	h	Fiscal Year	FY 2010 ²	EV 0044	F)/ 0040	EV 0040	EV 0044	0 171
System	Locality	Version	FY 2009 ¹	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota
Interstate - Does							-		
not include	Hampton Roads	FY 2009-14 WD	50,438	47,929	26,775	73,846	97,116	92,669	388,772
Regional	10	Governor's Plan	50,436	47,929	26,775	73,846	97,116	92,669	388,772
Package		Differences	0	0	0	0	0	0	(
Primary - Does									
not include	Hampton Roads	FY 2009-14 WD	7,443	6,798	6,667	6,835	6,672	4,893	39,308
Regional		Governor's Plan	15,591	14,779	15,793	15,220	14,227	12,346	87,955
Package		Differences	8,149	7,981	9,126	8,384	7,555	7,452	48,646
	Other Brainst Frank	li t- Di-t-l-t	20.047	45 450	40.450	40.707	0.504	40.400	400.05
	Other Project Fund	ling to District	39,817	15,458	13,159	12,797	9,584	16,138	106,953
Secondary - Does									
not include	Accomack	FY 2009-14 WD	1,370	1,339	1,331	1,341	1,328	1,210	7,919
Regional		Governor's Plan	1,950	1,970	1,968	2,002	2,015	1,899	11,805
Package		Differences	580	631	637	662	688	689	3,887
	Greensville	FY 2009-14 WD	564	545	541	541	533	472	3,196
		Governor's Plan	866	874	873	886	892	832	5,222
		Differences	302	329	332	345	358	359	2,026
	Isle of Wight	FY 2009-14 WD	1,064	1,034	1,031	1,018	1,008	897	6,05
	l and an angula	Governor's Plan	1,671	1,694	1,697	1,709	1,727	1,619	10,11
		Differences	606	660	666	691	719	721	4,064
	Inman City	TEV 2000 44 M/D	4 204	4.050	1 220	4 005	1 205	1.000	7.00
	James City	FY 2009-14 WD	1,284	1,253	1,230	1,235	1,205	1,028	7,23
		Governor's Plan	2,090	2,130	2,116	2,154	2,161	1,986	12,63
		Differences	806	877	885	919	955	958	5,400
	Northampton	FY 2009-14 WD	537	524	520	525	519	472	3,09
		Governor's Plan	765	772	771	785	790	743	4,62
		Differences	229	249	251	261	271	272	1,53
	Southampton	FY 2009-14 WD	966	929	923	911	898	782	5,40
		Governor's Plan	1,579	1,596	1,596	1,610	1,626	1,512	9,519
		Differences	613	668	674	699	727	730	4,11
	Surry	FY 2009-14 WD	379	364	360	360	354	308	2,12
	Surry	Governor's Plan	601	606	604	614	617	572	2,12
"the col" - "colo"	355	Differences	222	242	244	253	263	264	1,48
	Sussex	FY 2009-14 WD	698	670	665	659	649	563	3,90
		Governor's Plan	1,135	1,146	1,145	1,157	1,167	1,083	6,83
		Differences	437	476	480	498	518	520	2,929
	York	FY 2009-14 WD	1,101	1,074	1,049	1,052	1,019	843	6,13
	100 min 100 mi	Governor's Plan	1,888	1,930	1,913	1,949	1,952	1,778	11,40
		Differences	787	856	864	897	933	935	5,27
	Total All Localities	FY 2009-14 WD	7,963	7,732	7,649	7,641	7,513	6,575	45,07
	, star / in Localides	Governor's Plan	12,545	12,718	12,683	12,867	12,947	12,023	75,78
		Differences	4,582	4,986	5,034	5,226	5,433	5,448	30,70
in a	Other Project Fund	ting to District	30	512	280	134	127	1,332	2,41
l.	1		1						L

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

District Name Hampton Roads

(in thousands)

		I	Fiscal Year	F14.00402					I
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
Jrban - Does not	Chesapeake	FY 2009-14 WD	6,453	5,966	5,773	5,783	5,536	4,212	33,722
nclude Regional		Governor's Plan	12,329	12,359	12,230	12,487	12,504	11,197	73,107
Package		Differences	5,877	6,393	6,458	6,705	6,968	6,985	39,385
	Chincoteague	FY 2009-14 WD	209	198	196	197	193	168	1,161
	Onmootcagac	Governor's Plan	327	327	326	332	334	309	1,956
		Differences	119	129	130	135	141	141	795
	Emporia	FY 2009-14 WD	270	256	253	255	250	218	1,502
		Governor's Plan	421	421	420	428	430	398	2,519
		Differences	152	165	167	173	180	180	1,017
	Franklin	FY 2009-14 WD	405	385	379	382	375	326	2,252
	Tarkiii	Governor's Plan	635	636	633	645	649	600	3,798
		Differences	231	251	253	263	274	274	1,546
	-	Dillerences	231	231	200	203	214	214	1,040
	Hampton	FY 2009-14 WD	4,083	3,757	3,623	3,625	3,454	2,559	21,101
		Governor's Plan	8,041	8,063	7,972	8,141	8,147	7,263	47,627
		Differences	3,958	4,306	4,349	4,516	4,693	4,704	26,526
	Newport News	FY 2009-14 WD	5,103	4,696	4,527	4,530	4,316	3,196	26,368
	Newport News	Governor's Plan	10,055	10,082	9,968	10,179	10,188	9,081	59,554
		Differences	4,952	5,387	5,441	5,649	5,871	5,885	33,185
		Dilloronoo	1,002	0,000					
	Norfolk	FY 2009-14 WD	6,598	6,071	5,853	5,857	5,580	4,131	34,089
	100000000000000000000000000000000000000	Governor's Plan	13,001	13,037	12,889	13,162	13,173	11,742	77,005
		Differences	6,404	6,966	7,037	7,306	7,593	7,611	42,916
	Poquoson	FY 2009-14 WD	345	318	307	308	294	221	1,793
	roquoson	Governor's Plan	669	671	664	678	678	606	3,966
		Differences	324	353	356	370	384	385	2,173
	Portsmouth	FY 2009-14 WD	2,755	2,535	2,444	2,446	2,330	1,725	14,235
		Governor's Plan	5,429	5,444	5,382	5,496	5,501	4,903	32,156
		Differences	2,674	2,909	2,938	3,051	3,171	3,178	17,921
	Smithfield	FY 2009-14 WD	322	306	301	303	297	257	1,787
	Smithheid	Governor's Plan	512	512		520	523	482	
		Differences	190				225		1,273
1.10	7 100	Jan S							
	Suffolk	FY 2009-14 WD	3,240	3,051	2,992	3,009	2,930	2,447	17,668
		Governor's Plan	5,443	5,448	5,413	5,523	5,542	5,066	32,436
		Differences	2,204	2,397	2,421	2,514	2,613	2,619	14,769
	Virginia Danah	EV 2000 44 WD	12 220	11 250	10,860	10,869	10,364	7,707	63,283
	Virginia Beach	FY 2009-14 WD	12,226	11,258 24,041	23,772	24,275	24,297	21,672	
		Governor's Plan Differences	23,976 11,751	12,783		13,406	13,933	13,966	
		12	1 11,131	12,100	1=10.12	.0,.00		-1	
	Williamsburg	FY 2009-14 WD	370	341		329	313	232	1997
		Governor's Plan	730	732	723	739	739	659	
		Differences	359	391		410	426	427	2,409

9

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

Virginia Department of Transportation and Virginia Rail and Public Transportation Comparison of State Formula Allocations Planned in the Working Draft FY 2009 - 2014 Plan and Governor's FY 2009 - 2014 Plan

All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name	Hampton Roads

(in thousands)

						iii ulousalius)	Late and the same		
			Fiscal Year						
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
	Total All Localities	FY 2009-14 WD	42,377	39,139	37,836	37,892	36,234	27,397	220,874
		Governor's Plan	81,571	81,775	80,903	82,606	82,706	73,979	483,540
		Differences	39,194	42,636	43,067	44,715	46,472	46,582	262,666
	Other Project Fund	ing to District	50,323	32,860	14,869	28,618	12,851	3,744	143,266
All Highway Systems - Does									
not include	Total All Localities	FY 2009-14 WD	198,388	150,428	107,236	167,765	170,098	152,749	946,663
Regional		Governor's Plan	250,312	206,031	164,462	226,090	229,558	212,231	1,288,684
Package		Differences	51,924	55,603	57,227	58,325	59,460	59,482	342,021
	Operating	FY 2009-14 WD	13,989	14,578	14,949	15,358	15,832	16,153	90,859
Transit - Does not		Governor's Plan	19,132	20,829	21,043	21,366	21,725	22,197	126,292
include Regional		Differences	5,143	6,251	6,094	6,008	5,893	6,044	35,433
Package	Capital	FY 2009-14 WD	15,972	16,128	12,898	16,568	16,813	16,953	95,332
		Governor's Plan	18,676	19,412	16,100	19,725	19,908	20,128	113,949
		Differences	2,704	3,284	3,202	3,157	3,095	3,175	18,617
	Total	FY 2009-14 WD	29,961	30,706	27,847	31,926	32,645	33,106	186,191
		Governor's Plan	37,808	40,241	37,143	41,091	41,633	42,325	240,241
		Differences	7,847	9,535	9,296	9,165	8,988	9,219	54,050
Total Highway									
Construction and				101 101	105.000	100 001	000 740	405.055	4 422 054
Transit - Includes	Total All Localities	FY 2009-14 WD	228,349	181,134	135,083	199,691	202,743	185,855	1,132,854
Regional		Governor's Plan	456,020	438,772	403,505	477,781	490,591	481,656	2,748,325
Package		Differences	227,671	257,638	268,423	278,090	287,848	295,801	1,615,471

10

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session

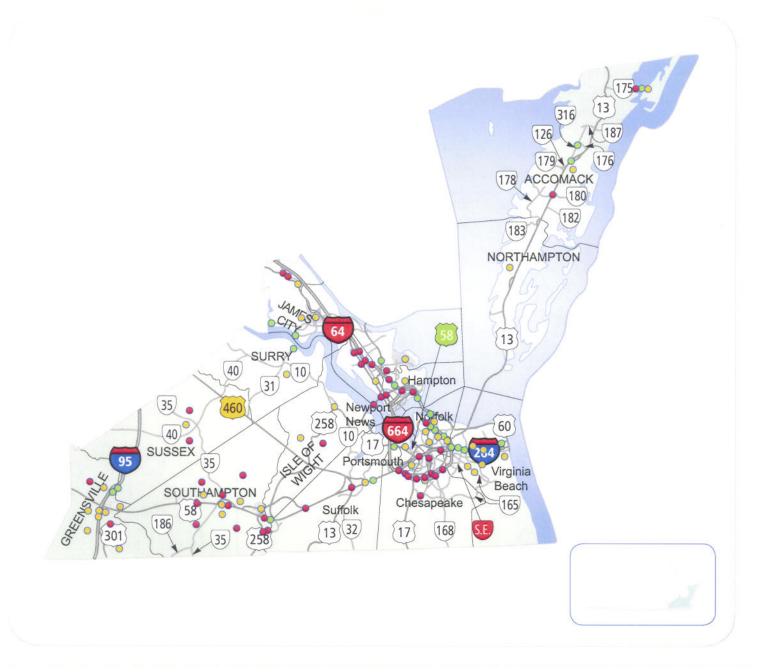
will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.



HAMPTON ROADS DISTRICT

DRAFT FY09-14 SIX-YEAR IMPROVEMENT PROGRAM



LEGEND



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program

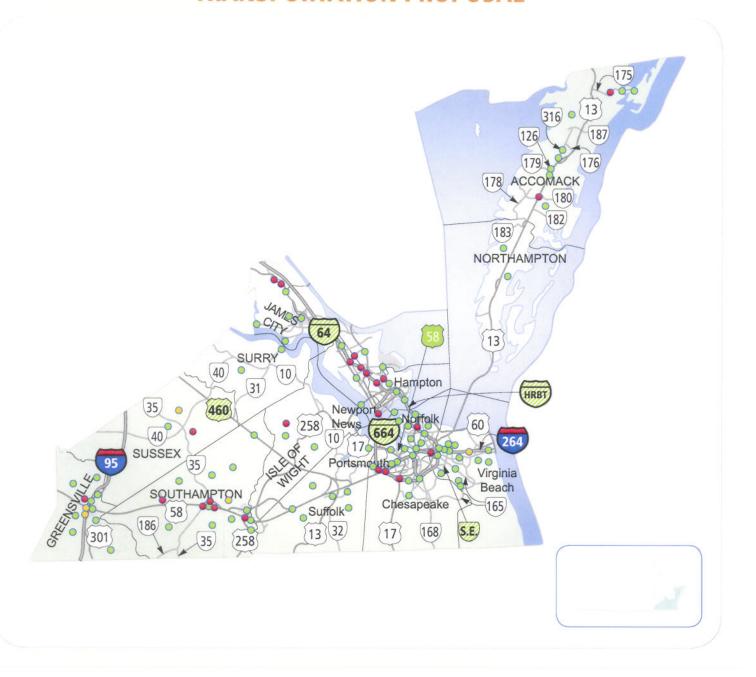


Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



HAMPTON ROADS DISTRICT

PROJECT BENEFITS OF GOVERNOR KAINE'S TRANSPORTATION PROPOSAL



LEGEND



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program

Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program









Hampton Roads Regional Projects

District Name Lynchburg

(in thousands)

			Fiscal Year						
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
nterstate	Lynchburg	FY 2009-14 WD	0	0	0	0	0	0	1
0.0	111/1/2025	Governor's Plan	0	0	0	0	0		(
		Differences	. 0	0	0	0	0		C
Daim on .	Lunghhung	TEV 2000 44 MD	10.005	0.007	0.070	0.100	0.004	2.000	
Primary	Lynchburg	FY 2009-14 WD	10,265	9,287	9,079	9,136	9,021		53,421
		Governor's Plan	20,011	20,002	19,784	20,201	20,607		118,957
	-	Differences	9,746	10,715	10,705	11,066	11,585	11,719	65,536
	Other Project Fund	ding to District	6,338	9,196	3,687	3,621	3,639	4 237	30,718
			1		0,007	0,021	0,000	1,201	00,710
Secondary	dary Amherst FY 2009-14 WD Governor's Plan Differences 1,449 2,271 822 1,408 895 1,407 2,310 937 1,385 2,322 2,350 903 1,375 975 Appomattox FY 2009-14 WD Governor's Plan Differences 686 401 401 663 436 440 660 453 457 646 467 475 Buckingham FY 2009-14 WD Governor's Plan Differences 1,014 1,838 1,838 1,868 1,877 1,867 1,897 1,	1,230	8,255						
		Governor's Plan	2,271	2,303	2,310	2,322	2,350	2,209	13,767
		Differences	822	895	903				5,512
		Investor							
	Appomattox	[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]							3,878
			No. 200	1,100	1,100	1,110		1,047	6,564
		Differences	401	436	440	457	475	477	2,686
	Ruckingham	FV 2009-14 WD	1.014	970	073	020	020	795	5,590
	Duckingham		Was to the second						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			4.600	100000000000000000000000000000000000000					11,113
		JDiπerences	824	897	905	939	9//	981	-5,522
	Campbell	FY 2009-14 WD	1,948	1,902	1,890	1,903	1,884	1,713	11,241
		Governor's Plan	(50) (50) (50)					400 (000)	16,874
		Differences	841	914	924	959	997		5,633
	Charlotte	FY 2009-14 WD	726	697	693	680	670	579	4,045
		Governor's Plan	1,217	1,232	1,232	1,240	1,253	1,164	7,338
		Differences	491	535	540	560	583	585	3,294
	Cumberland	FY 2009-14 WD	526	505	505	488	483	440	2,925
	Cumbenand	Governor's Plan	911	924	928	927			
			0505000				940		5,506
	-	Differences	385	419	423	439	457	458	2,581
	Halifax	FY 2009-14 WD	1,432	1,383	1,372	1,369	1,350	1,191	8,097
		Governor's Plan	2,231	2,253	2,250	2,280	2,297		13,452
		Differences	799	869	878	911	947		5,355
	Nelson	FY 2009-14 WD	672	837	838	304	797		4.835
		Governor's Plan	1,544	1,569	1,576	1,570	1,595	0.00	9,341
		Differences	672	732	738	766	797	800	4,505
	Pittsylvania	FY 2009-14 WD	2,880	2,792	2,788	2,745	2,722	2.425	16,353
	I Idayiyailla	Governor's Plan	4,547	4,607	4,619	4,646	4,699	500.	27,527
			1,667	17.33	1,831				
		Differences	1,00/	1,815	1,031	1,900	1,977	1,984	11,174
	Prince Edward	FY 2009-14 WD	741	714	713	692	685	594	4,139
	Process of the second s	Governor's Plan	1,268	1,288	1,292	1,293	1,310		7,673
		Differences	527	574	579	601	625		3,534
		-							-,
	Total All Localities	FY 2009-14 WD	12,275	11,872	11,840	11,648	11,532	10,192	69,359
		Governor's Plan	19,703	19,960	19,999	20,117	20,343	19,033	119,155
		Differences	7,428	8,088	8,160	8,469	8,811	8,841	49,796
	Other Basis at 5	line to District	-	0.540	4 400	0.175	0.045	4.000	11.000
	Other Project Fund	ing to District	0	2,513	1,482	2,475	3,945	1,393	11,808

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session

will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

1	District Name	Lynchburg

(in thousands)

			1=			in thousands)			
			Fiscal Year	2					
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
Urban	Altavista	FY 2009-14 WD	163	155	153	154	151	132	909
		Governor's Plan	255	255	254	259	260	241	1,524
		Differences	92	100	101	105	109	109	615
			1						
	Danville	FY 2009-14 WD	2,238	2,130	2,103	2,120	2,083	1.820	12,494
	Darrymo	Governor's Plan	3,470	3,470	3,457	3,525	3,543	3,284	20,747
		Differences	1,232	1,340	1,353	1,405	1,460	1,464	8,254
		Dillerences	1,202	1,540	1,333	1,405	1,400	1,404	0,234
	Farmville	FY 2009-14 WD	330	314	309	312	306	266	1,836
	ramiville	Governor's Plan	517	517	515	525		488	3,090
			17.0000				528		100000000000000000000000000000000000000
		Differences	187	204	206	214	222	222	1,254
	Lynchburg	FY 2009-14 WD	3,257	3,091	3,048	3,070	3,010	2,604	18,079
	Lynchburg		120000000000000000000000000000000000000						
		Governor's Plan	5,149	5,150	5,127	5,229	5,254	4,853	30,762
		Differences	1,892	2,059	2,079	2,159	2,244	2,249	12,682
	South Boston	FY 2009-14 WD	395	376	371	374	368	321	2,206
	Codui Doston	Governor's Plan	614	614	612	624	627	581	3,673
		Differences	219	238	240	250	259	260	1,467
		Differences	213	230	240	230	239	200	1,407
	Total All Localities	FY 2009-14 WD	6,383	6,066	5,985	6,030	5,918	5.142	35,524
	Total All Localities		10,005	10,006	9,965	10,162	10,212	9,447	59,797
		Governor's Plan			V-010-2010-00-01-15				\$20,65 V 15 V 12 V 2 V 12 V
		Differences	3,622	3,940	3,980	4,132	4,294	4,305	24,273
	Other Project Funding to District		1,927	518	68	68	64	48	2,692
All Highway		1	+						-
10.75	Total All Localities	FY 2009-14 WD	37,189	39,452	32,140	32,977	34,119	27,646	203,523
Oystems	Total All Localities	Governor's Plan	57,985	62,195	54,984	56,644	58,810	52,509	343,127
		Differences	20,796	22,743	22,844	23,667	24,691	24,864	139,604
Transit	Operating	TFY 2009-14 WD	1,747	1,821	1,867	1,918	1,978	2.018	11,349
All Highway Systems Transit	Operating	Governor's Plan	2,390	2,602	2,628	2,669	2,714	2,773	15,776
		Differences	643	781	761	751	736	755	4,427
		Dillerences	043	701	701	751	730	755	4,421
	Conital	FY 2009-14 WD	630	636	509	654	663	669	3,761
	Capital		2777200						130000
		Governor's Plan	737	766	635	778	785	794	4,495
6		Differences	107	130	126	124	122	125	734
	Totai	IFY 2009-14 WD	2,377	2,457	2,376	2,5/2	2,641	2,687	15,110
	Total	Governor's Plan	3,127	3,368	3,263	3,447	3,499	3,567	20,271
		Differences	750	911	887	875	858	880	5,161
			1						
Total Highway	1		1						
Construction and			The special section of						2002.000.000.000.000
Transit	Total All Localities	FY 2009-14 WD	39,566	41,909	34,516	35,549	36,760	30,333	218,633
		Governor's Plan	61,112	65,563	58,247	60,091	62,309	56,076	363,398
		Differences	21,546	23,654	23,731	24,542	25,549	25,744	144,765

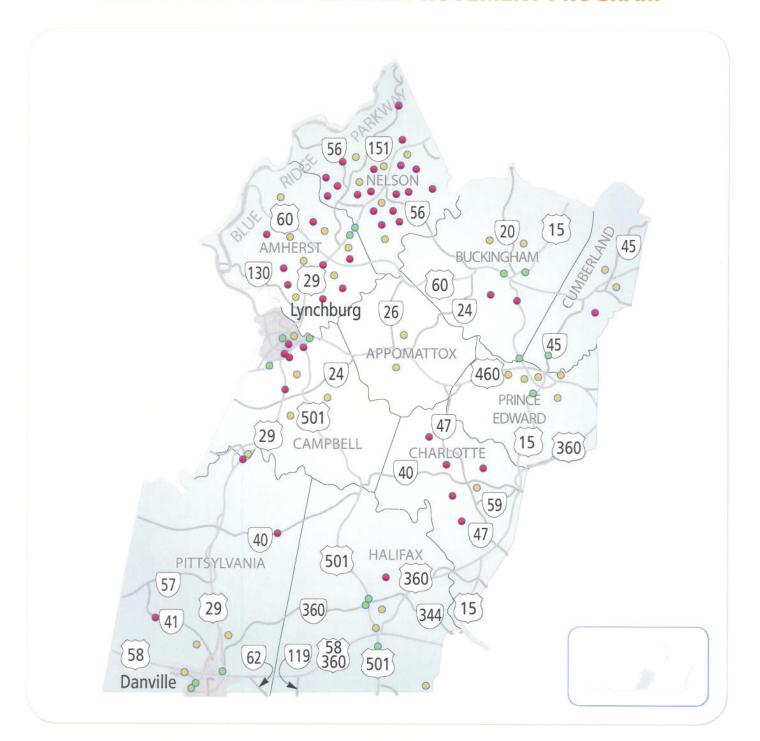
^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.



LYNCHBURG DISTRICT

DRAFT FY09-14 SIX-YEAR IMPROVEMENT PROGRAM







Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program

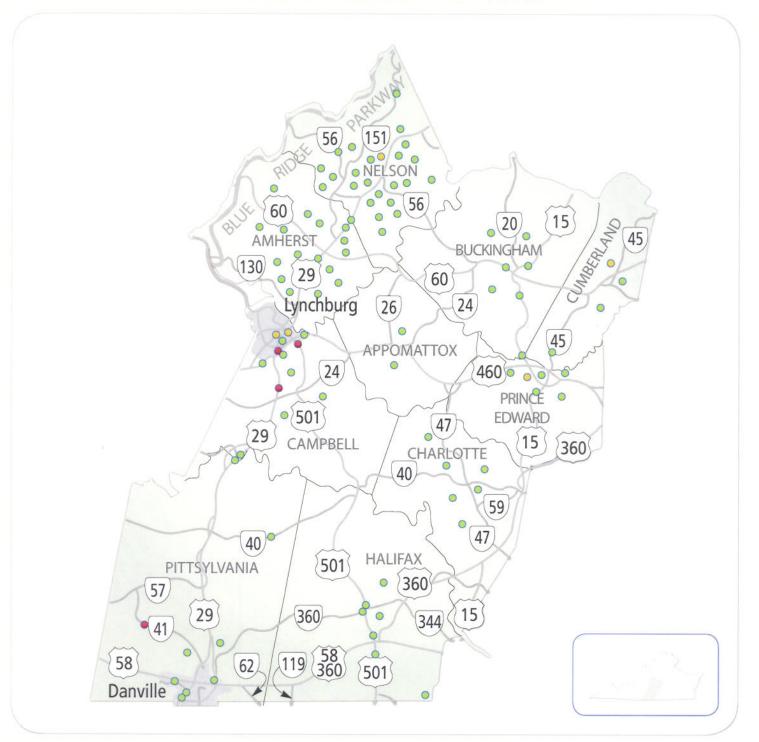


Cancelled/Candidate Projects without full funding in the Draft FY09-14 Six-Year Improvement Program



LYNCHBURG DISTRICT

PROJECT BENEFITS OF GOVERNOR KAINE'S TRANSPORTATION PROPOSAL











District Name | Northern Virginia

(in thousands)

		(in thousands)									
			Fiscal Year								
	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota		
Interstate - Does											
not include	Northern Virginia	FY 2009-14 WD	234,425	213,304	219,929	184,024	90,612	56,975	999,270		
Regional		Governor's Plan	234,425	213,304	219,929	184,024	90,612	56,975	999,270		
Package		Differences	0	0	0	0	0	0			
	-		-								
P10 5. 10											
	Northern Virginia	FY 2009-14 WD	16,577	15,142	14,573	15,224	14,861	10,899	87,276		
		Governor's Plan	30,381	30,319	29,736	32,279	33,231	31,281	187,227		
Package		Differences	13,805	15,177	15,162	17,055	18,370	20,382	99,952		
S/	Other Project Fund	ling to District	89,951	59,686	24,612	33,857	41,954	17,445	267,504		
not include	Arlington	FY 2009-14 WD	2,527	2,316	2,233	2,236	2,130	1,580	13,022		
Regional		Governor's Plan	4,960	4,963	4,906	5,012	5,016	4,472	29,329		
Package		Differences	2,433	2,647	2,674	2,776	2,885	2,892	16,307		
not include Regional Package Primary - Does not include Regional Package Secondary - Does not include Regional Package	Fairfax	FY 2009-14 WD	12.650	44 600	44 004	11 000	40 707	0.000	05.50		
	ralliax	Governor's Plan	12,659	11,623	11,221	11,239	10,727	8,033	65,501		
		Differences	24,590	24,603	24,332	24,852	24,874	22,215	145,465		
	-	Differences	11,932	12,980	13,111	13,613	14,148	14,181	79,964		
	Loudoun	FY 2009-14 WD	4,162	3,866	3,799	3,704	3,596	2,835	21,962		
	0.00.00.0000	Governor's Plan	8,011	8,056	8,028	8,094	8,161	7,415	47,765		
		Differences	3,849	4,190	4,229	4,390	4,566	4,580	25,803		
	Prince William	FY 2009-14 WD	5,300	4,898	4,755	4,752	4,566	3,532	27,802		
	1	Governor's Plan	9,974	9,982	9,890	10,084	10,107	9,088	59,125		
		Differences	4,674	5,085	5,135	5,332	5,542	5,555	31,323		
	Total All Localities	FY 2009-14 WD	24,647	22,702	22,007	21,932	21,019	15,980	128,288		
	Total 7 III Eddantido	Governor's Plan	47,535	47,604	47,156	48,042	48,159	43,189	281,685		
		Differences	22,888	24,902	25,149	26,110	27,140	27,208	153,397		
	Other Project Funding to District		38,891	10,240	969	307	294	728	51,429		
	-		+								
	Alexandria	FY 2009-14 WD	3,823	3,517	3,391	3,393	3,233	2,394	19,751		
		Governor's Plan	7,533	7,554	7,468	7,626	7,633	6,803	44,617		
Раскаде		Differences	3,710	4,036	4,077	4,233	4,399	4,410	24,866		
454 67	Dumfries	FY 2009-14 WD	135	124	119	119	114	84	695		
nterstate - Does not include Regional Package Primary - Does not include Regional Package Secondary - Does not include Regional Package Jrban - Does not nclude Regional	Danimoo	Governor's Plan	265	266	263	268	269	239	1,570		
		Differences	131	142	143	149	155	155	875		
								N.			
	Fairfax	FY 2009-14 WD	649	597	576	576	549	406	3,353		
		Governor's Plan	1,279	1,283	1,268	1,295	1,296	1,155	7,575		
		Differences	630	685	692	719	747	749	4,222		
	Falls Church	EV 2000 14 M/D	245	200	200	200	207	407	4.000		
	alls Church	FY 2009-14 WD	315	290	280	280	267	197	1,629		
		Governor's Plan	621	623	616	629	630	561	3,681		
		Differences	306	333	336	349	363	364	2,051		
	Herndon	FY 2009-14 WD	612	563	543	543	517	383	3,160		
		Governor's Plan	1,205	1,209	1,195	1,220	1,221	1,089	7,139		
		The second of th					.,	.,			

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

District Name Northern Virginia

(in thousands)

			(in thousands)						
			Fiscal Year						
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
	Leesburg	FY 2009-14 WD	1,054	970	936	936	893	662	5,451
		Governor's Plan	2,071	2,076	2,053	2,097	2,098	1,871	12,266
		Differences	1,017	1,106	1,117	1,160	1,206	1,209	6,815
	Manassas	FY 2009-14 WD	1,021	940	906	907	864	639	5,277
		Governor's Plan	2,012	2,018	1,995	2,037	2,039	1,818	11,920
		Differences	991	1,078	1,089	1,131	1,175	1,178	6,643
	Manassas Park	FY 2009-14 WD	390	359	346	346	330	244	2,015
	IVIdilassas Faik	Governor's Plan	769	771	762	778	779		100000000000000000000000000000000000000
							2000	694	4,552
		Differences	379	412	416	432	449	450	2,537
	Purcellville	FY 2009-14 WD	207	196	193	194	400	161	1 1 1 1 1
	Purceliville		0.0000				189	10.75	1,140
		Governor's Plan	339	339	337	344	345	317	2,021
		Differences	132	143	144	150	156	156	881
	Vienna	FY 2009-14 WD	416	383	369	369	352	260	2,148
		Governor's Plan	819	822	812	830	830	740	4,853
		Differences	404	439	443	460	479	480	2,705
	Total All Localities	FY 2009-14 WD	8,621	7,939	7,658	7,664	7,307	5,432	44,620
		Governor's Plan	16,914	16,960	16,770	17,124	17,140	15,288	100,194
		Differences	8,293	9,021	9,112	9,461	9,832	9,856	55,574
	Other Project Fund	ing to District	12,036	504	155	155	147	109	13,106
All Highway Systems - Does not include Regional	Total All Localities	FY 2009-14 WD Governor's Plan	425,149 470,134	329,517 378,617	289,903 339,326	263,162 315,788	176,194 231,537	107;568 165,014	1,591,493 1,900,415
Package		Differences	44,985	49,100	49,423	52,626	55,343	57,446	308,923
		4	1	,		02,020	50,0.0	011110	500,020
	Operating	FY 2009-14 WD	93,422	97,352	99,833	102,560	105,729	107,873	606,769
Transit - Does not		Governor's Plan	127,766	139,095	140,525	142,686	145,081	148,230	843,383
include Regional		Differences	34,344	41,743	40,692	40,126	39,352	40,357	236,614
Package	Capital	FY 2009-14 WD	70,240	70,926	56,721	72,860	73,935	74,554	419,236
	Capital	Governor's Plan	82,130	85,368	70,801	86,744	87,550	88,515	501,108
		Differences	11,890	14,442	14,080	13.884	13.615	13.96 i	61,872
	anci:	Differences	11,030	14,442	14,000	13,004	13.013	13.301	Day all styles
	Total	FY 2009-14 WD	163,662	168,278	156,554	175,420	179,664	182,427	1,026,005
	1000	Governor's Plan	209,896	224,463	211,326	229,430	232,631	236,745	1,344,491
		Differences	46,234	56,185	54,772	54,010	52,967	54,318	318,486
		Dilloronoco	10,201	00,100	01,112	01,010	02,001	01,010	010,100
Total Highway									
Construction and		1							
Transit - Includes	Total All Localities	FY 2009-14 WD	588,811	497,795	446,457	438,582	355,858	289,995	2,617,498
Regional		Governor's Plan	986,330	954,180	918,952	929,418	864,468	816,059	5,469,406
Package		Differences	397,519	456,385	472,495	490,836	508,610	526,064	2,851,909

06/19/2008 14

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.



NOVA DISTRICT

DRAFT FY09-14 SIX-YEAR IMPROVEMENT PROGRAM



LEGEND



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program

Advertised/Completed Projects

in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



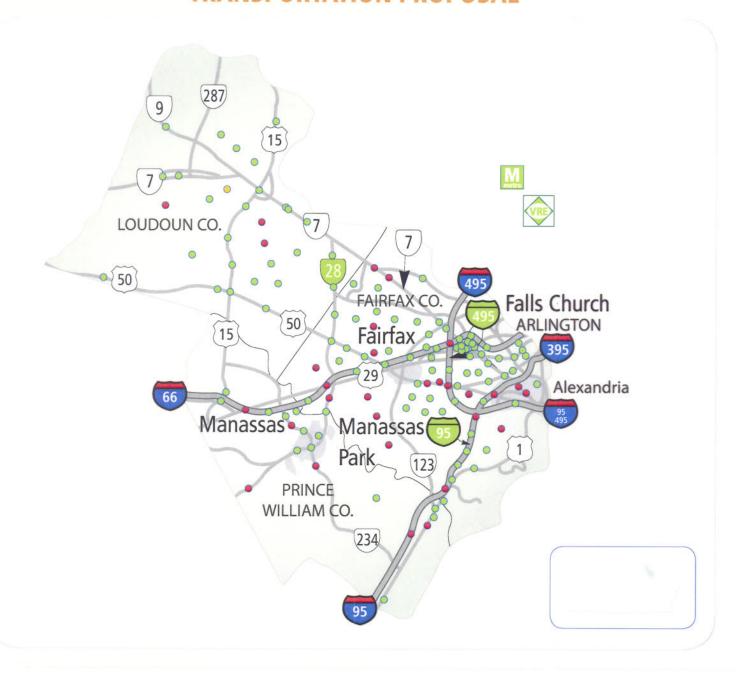


Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



NOVA DISTRICT

PROJECT BENEFITS OF GOVERNOR KAINE'S TRANSPORTATION PROPOSAL







Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program







District Name	Richmond

(in thousands)

	(in thousands)								
Sustan	I coolit:	Varsier	Fiscal Year	EV 20402	EV 0044	FW costs	FV	F)/ 55:::	la :-
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013		Grand Tota
Interstate	Richmond	FY 2009-14 WD	12,030	17,871	23,665	39,537	33,856		137,532
		Governor's Plan	12,030	17,871	23,665	39,537	33,856	FY 2014 10,572 10,572 10,572 0 10,637 30,545 19,908 1,819 536 1,108 572 786 1,451 666 281 493 212 4,079 8,610 4,531 853 1,634 781 682 1,210 528 1,981 3,665 1,684 2.651 6,923 4,271 622 1,330 708 1,073 2,062 989 555 988 433	137,532
		Differences	0	0	0	0	0	0	(
Primary	Richmond	FY 2009-14 WD	17,381	15,578	14,529	14,716	13,795	10.637	86,636
	rtionmond	Governor's Plan	33,883	33,728	32,694	33,516	33,529		197,894
		Differences	16,502	18,151	18,165	18,800	19,734		111,259
		Tomoronoco	10,502	10,131	10,105	10,000	15,734	19,900	111,25
	Other Project Fu	unding to District	29,320	17,595	14,741	16,882	9,931	1,819	90,289
_									
Secondary	Amelia	FY 2009-14 WD	674	647	646	628	621	536	3,752
		Governor's Plan	1,154	1,171	1,174	1,176	1,191	1,108	6,973
		Differences	480	523	528	548	570	572	3,22
	Daniel de la constant	EV 2000 44 WE	055		0.10				
	Brunswick	FY 2009-14 WD	955	921	913	908	895		5,379
		Governor's Plan	1,515	1,530	1,528	1,547	1,559		9,13
		Differences	560	609	615	638	664	666	3,75
	Charles City	FY 2009-14 WD	334	323	321	321	316	201	1,896
	Orianes Oity	Governor's Plan	513	518	517	525	528		3,093
		Differences	179	194	196	204	212		1,197
		10merences	175	134	130	204	212	212	1,137
	Chesterfield	FY 2009-14 WD	5,328	5,193	5,074	5,083	4,929	4,079	29,686
		Governor's Plan	9,141	9,340	9,262	9,432	9,449	8,610	55,234
		Differences	3,812	4,147	4,189	4,349	4,520	4,531	25,548
	Dinwiddie	FY 2009-14 WD	1,049	1,014	1,005	995	980		5,897
		Governor's Plan	1,706	1,728	1,727	1,744	1,759		10,297
		Differences	656	714	721	749	778	781	4,400
	Goochland	FY 2009-14 WD	810	786	781	778	768	682	4,605
	o o o o o maria	Governor's Plan	1,254	1,270	1,269	1,284	1,295		7,583
		Differences	444	484	488	507	527		2,978
		10 moronoco	1	404	400	001	021	320	2,570
	Hanover	FY 2009-14 WD	2,409	2,346	2,318	2,316	2,274	1,981	13,644
		Governor's Plan	3,825	3,887	3,874	3,932	3,953	3,665	23,136
		Differences	1,416	1,541	1,556	1,615	1,679	1,684	9,492
	Henrico	FY 2009-14 WD	4,033	3,710	3,601	3,611	3,460		21,075
Secondary		Governor's Plan	7,627	7,629	7,550	7,711	7,721		45,161
		Differences	3,594	3,910	3,949	4,100	4,261	4,271	24,086
	Lunenburg	FY 2009-14 WD	789	757	757	730	723	622	4,377
	Lunenburg	Governor's Plan	1,384	1,404	1,410				
		Differences	595	648	653	1,407 678	1,428 705		8,363 3,986
		Joinerences	333	040	033	0/0	703	700	3,900
	Mecklenburg	FY 2009-14 WD	1,305	1,260	1,258	1,232	1,220	1.073	7,347
	and the state of t	Governor's Plan	2,136	2,165	2,171	2,179	2,205		12,918
	2.1.00000000	Differences	831	905	913	947	986		5,571
	New Kent	FY 2009-14 WD	658	640	636	632	624	555	3,745
		Governor's Plan	1,022	1,036	1,036	1,047	1,056	988	6,184
		Differences	364	396	400	415	432	433	2,439
	Nettorio	JEV 2000 44145							
	Nottoway	FY 2009-14 WD	580	561	558	555	548		3,287
		Governor's Plan	901	911	910	921	929		5,440
	1	Differences	321	350	353	366	381	382	2,153

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality

is expected to be minimal, on average the reductions would be approximately \$30,000.

All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name Richmond

(in thousands)

					(in thousands)			
	_		Fiscal Year	2					,
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota
	Powhatan	FY 2009-14 WD	1,033	1,006	1,001	997	986	884	5,906
- 20 7 7000		Governor's Plan	1,569	1,599	1,589	1,600	1,622	1,521	9,497
		Differences	536	583	589	611	635	637	3,591
	Prince George	FY 2009-14 WD	1,074	1,047	1,035	1,040	1,023	904	6,123
		Governor's Plan	1,636	1,659	1,653	1,682	1,690	1,573	9,894
		Differences	563	612	618	642	667	669	3,771
	Total All Localities	FY 2009-14 WD	21,032	20,220	19,904	19,825	19,367	16.372	116.720
	Total 7 iii Eodalidoo	Governor's Plan	35,383	35,836	35,671	36,194	36,386	33,436	212,905
		Differences	14,351	15,616	15,767	16,369	17,018	17,064	96,186
	Other Project Fund	ing to District	5,029	6,100	10,125	2,688	2,346	5,802	32,089
Urban	Ashland	FY 2009-14 WD	199	183	177	177	169	126	1,031
Jibali	Asilialiu	Governor's Plan	390	392	387	395	396	126 353	2,313
		Differences	191	208	210	218	227	227	1,282
		I=		- 721					
	Blackstone	FY 2009-14 WD	173	164	162	163	160	140	963
		Governor's Plan	269	269	268	273	274	254	1,607
	-	Differences	96	105	106	110	114	114	645
	Chase City	FY 2009-14 WD	116	110	108	109	107	94	644
		Governor's Plan	180	179	179	182	183	170	1,072
		Differences	64	70	70	73	76	76	428
	Colonial Heights	FY 2009-14 WD	488	449	433	433	413	306	2,523
	- Constitution of the Cons	Governor's Plan	962	965	954	974	975	869	5,698
		Differences	474	516	521	541	562	.563	3,176
	Hopewell	FY 2009-14 WD	634	584	563	563	537	397	3,278
	Hopeweii	Governor's Plan	1,250	1,254	1,240	1,266	1,267		7,406
		Differences	616	670	677	703	730	1,129 732	4,127
		Dinordinoco	1 0.0	010	011	7.00	700	702	7,12.
	Petersburg	FY 2009-14 WD	901	831	802	802	766	572	4,674
	400	Governor's Plan	1,758	1,763	1,744	1,780	1,782	1,591	10,418
		Differences	857	932	942	978	1,016	1,019	5,745
	Richmond	FY 2009-14 WD	5,460	5,024	4,844	4,847	4,618	3 419	28,212
The State of the last of the l	- word	Governor's Pian	10,760	10,789	10,667	10,893	10,902	9,718	63,729
		Differences	5,300	5,765	5,823	6,046	6,284	6,299	35,517
	South Hill	FY 2009-14 WD	217	206	203	205	201	174	1,206
	Sodurrini	Governor's Plan	342	342	341	347	349	323	2,044
		Differences	125	136	137	143	148	149	838
	Total All Localities	FY 2009-14 WD	8,188	7,551	7,292	7,300	6,971	5,227	42,529
	1	Governor's Plan	15,911	15,953	15,778	16,111	16,128	14,406	94,287
		Differences	7,723	8,401	8,486	8,811	9,157	9,179	51,758
	Other Project Fund	ling to District	9,133	6,821	2,393	143	136	101	18,727
All Highway	-		+						
Systems	Total All Localities	FY 2009-14 WD	102,113	91,737	92,648	101,091	86,403	50,530	524,521
		Governor's Plan	140,688	133,905	135,067	145,071	132,312	96,680	783,723
	1	Differences	38,576	42,168	42,419	43,980	45,909	46,151	259,203

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality

is expected to be minimal, on average the reductions would be approximately \$30,000.

Virginia Department of Transportation and Virginia Rail and Public Transportation

Comparison of State Formula Allocations Planned in the Working Draft FY 2009 - 2014 Plan and

Governor's FY 2009 - 2014 Plan

All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name Richmond

(in thousands)

						iii diousanas	,		
			Fiscal Year						
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
Transit	Operating	FY 2009-14 WD	9,300	9,692	9,939	10,210	10,525	10,739	60,405
		Governor's Plan	12,719	13,847	13,989	14,205	14,443	14,757	83,960
		Differences	3,419	4,155	4,050	3,995	3,918	4,018	23,555
	Capital	FY 2009-14 WD	3,477	3,511	2,808	3,607	3,660	3,691	20,754
		Governor's Plan	4,066	4,226	3,505	4,294	4,334	4,382	24,807
		Differences	589	715	697	687	674	691	4,053
23	Total	FY 2009-14 WD	12,777	13,203	12,747	13,817	14,185	14,430	81,159
	Commons successive	Governor's Plan	16,785	18,073	17,494	18,499	18,777	19,139	108,767
		Differences	4,008	4,870	4,747	4,682	4,592	4,709	27,608
Total Highway			+						
Construction and			1						
Transit	Total All Localities	FY 2009-14 WD	114,890	104,940	105,395	114,908	100,588	64,960	605,680
		Governor's Plan	157,473	151,978	152,561	163,570	151,089	115,819	892,490
		Differences	42,584	47,038	47,166	48,662	50,501	50,860	286,811

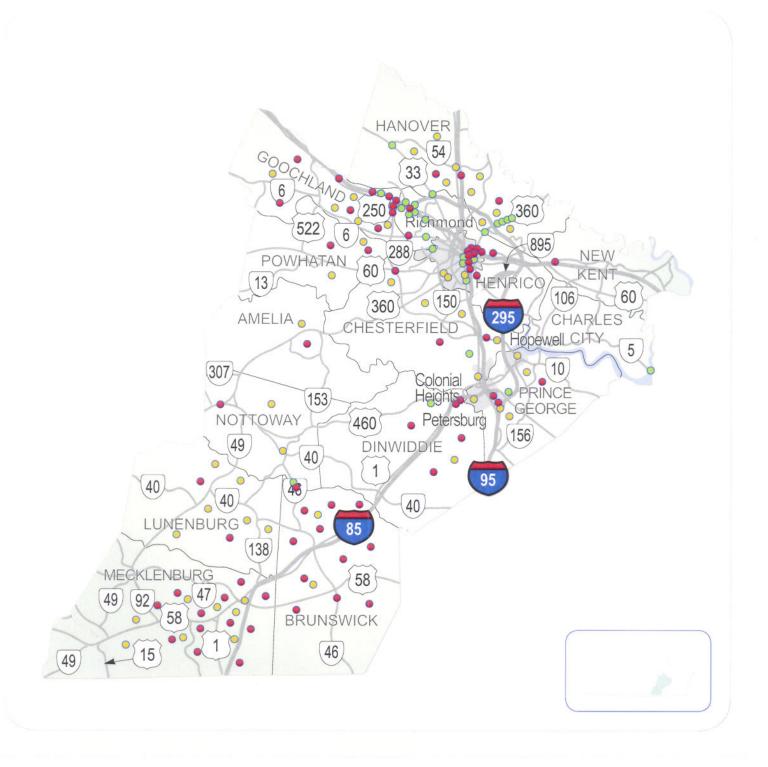
^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.



RICHMOND DISTRICT

DRAFT FY09-14 SIX-YEAR IMPROVEMENT PROGRAM







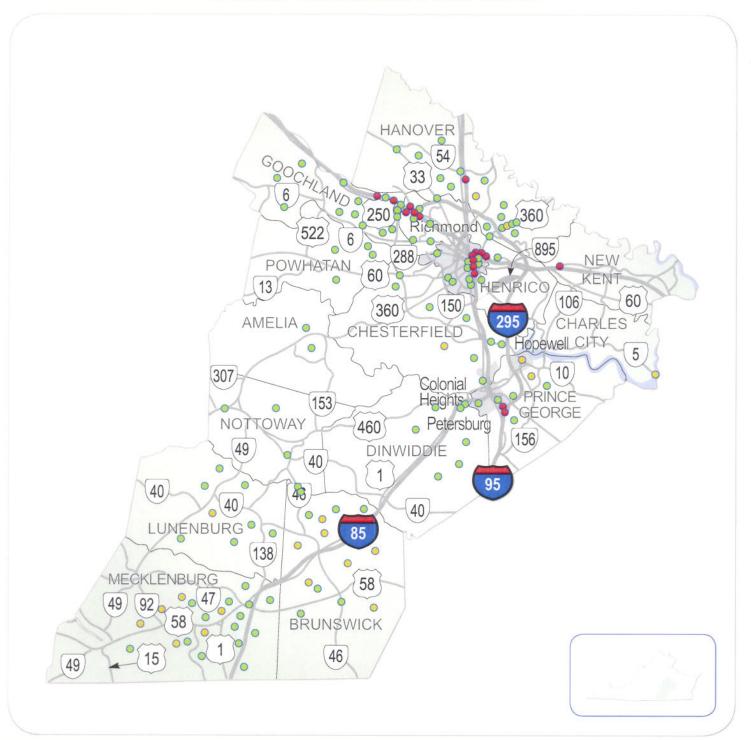






RICHMOND DISTRICT

PROJECT BENEFITS OF GOVERNOR KAINE'S TRANSPORTATION PROPOSAL











All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name	Salem

(in thousands)

			Eigen Vans			in thousands)			
System	Locality	Version	Fiscal Year FY 2009 ¹	FY 2010 ²	EV 2014	EV 2042	EV 2042	EV 2044	0
nterstate	Salem	FY 2009-14 WD	22,102	27,775	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
merstate	Salem	Governor's Plan			29,337	37,157	44,902	57,270	218,54
		Differences	22,102	27,775	29,337	37,157	44,902	57,270	218,54
	-	Differences	0	0	0	0	0	0	
rimary	Salem	FY 2009-14 WD	11,648	10,538	9,873	9,940	8,929	6,549	57,47
		Governor's Plan	22,708	22,697	22,040	22,532	21,817	18,351	130,14
		Differences	11,059	12,159	12,168	12,593	12,888	11,802	72,66
	Other Project Fu	unding to District	4,773	13,443	7,319	6,282	7,917	5,115	44,84
Secondary	Bedford	FY 2009-14 WD	2,679	2,609	2,598	2,587	2,562	2,304	15,33
,		Governor's Plan	4,040	4,090	4,093	4,139	4,176	3,923	24,46
		Differences	1,361	1,481	1,495	1,552	1,614	1,619	9,12
	Botetourt	FY 2009-14 WD	1,367	1,330	1,324	1,318	1,305	1,172	7,81
		Governor's Plan	2,071	2,096	2,098	2,121	2,140	2,009	12,53
	-	Differences	704	766	774	803	835	838	4,72
	Carroll	FY 2009-14 WD	1,443	1,397	1,398	1,361	1,352	1,195	8,14
	1330000	Governor's Plan	2,371	2,407	2,418	2,419	2,453	2,300	14,36
		Differences	928	1,011	1,019	1,058	1,101	1,105	6,22
	Croin	IFV 2000 14 MD	074	004	050	050	050	004	
	Craig	FY 2009-14 WD	271	261	259	256	253	221	1,52
		Governor's Plan	439	444	444	448	452	421	2,65
	-	Differences	168	183	185	192	200	200	1,12
	Floyd	FY 2009-14 WD	825	793	795	762	756	652	4,58
		Governor's Plan	1,456	1,480	1,488	1,482	1,505	1,404	8,81
		Differences	631	688	693	719	749	752	4,23
	Franklin	FY 2009-14 WD	1,993	1,936	1,925	1,919	1,898	1,697	11,36
	1 rankin	Governor's Plan	3,034	3,069	3,069	3,106	3,133	2,935	18,34
		Differences	1,041	1,133	1,144	1,188	1,235	1,239	6,98
		Dilicionoco	1,041	1,100	1,144	1,100	1,200	1,235	0,90
	Giles	FY 2009-14 WD	598	577	577	564	559	492	3,36
		Governor's Plan	982	995	998	1,001	1,014	949	5,93
		Differences	384	418	421	437	455	457	2,57
	Henry	FY 2009-14 WD	2,183	2,139	2,129	2.149	2,131	1.952	12.69
The second		Governor's Plan	3,019	3,048	3,047	3,102	3,122	2,955	18,29
		Differences	836	909	918	954	991	993	5,60
		TEN ODDO ALLED	4.000						
	Montgomery	FY 2009-14 WD	1,280	1,244	1,242	1,224	1,213	1,083	7,28
		Governor's Plan	2,012	2,041	2,046	2,058	2,081	1,953	12,19
		Differences	732	797	804	834	868	871	4,90
	Patrick	FY 2009-14 WD	795	762	756	737	724	611	4,38
		Governor's Plan	1,404	1,425	1,425	1,432	1,447	1,335	8,46
		Differences	609	663	669	694	722	725	4,08
	Pulaski	FY 2009-14 WD	4 975	4 046	4 246	4 044	4.000	4.440	7.00
	Fulaski		1,275	1,246	1,246	1,244	1,238	1,142	7,39
		Governor's Plan	1,813	1,832	1,838	1,857	1,877	1,782	10,99
		Differences	538	586	591	614	638	640	3,60

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality

is expected to be minimal, on average the reductions would be approximately \$30,000.

All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name Salem

(in thousands)

			Final Vans			in thousands)			
ystem	Locality	Version	Fiscal Year FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand To
rsteili	Roanoke	FY 2009-14 WD	2,937	2,885	2,873	2,899	2,877	2,654	17,13
	Noarioke	Governor's Plan	4,042	4,087	4,087	4,159	4,187	3,968	24,5
	1,000,000	Differences	1	1,202	1,214				
		Dillerences	1,105	1,202	1,214	1,261	1,310	1,313	7,4
	Total All Localitie	s FY 2009-14 WD	17,647	17,179	17,123	17,019	16,869	15,184	101,0
	Total 7 iii Eoodiido	Governor's Plan	26,684	27,017	27,051	27,325	27,588	25,936	161,6
		Differences	9,037	9,837	9,928	10,306	10,719	10,752	60,5
		Dillerences	9,037	9,037	9,920	10,300	10,719	10,732	00,5
	Other Project Fur	nding to District	825	2,943	3,712	3,202	3,509	3,764	17,9
an	Bedford	FY 2009-14 WD	297	282	279	281	276	240	1,6
		Governor's Plan	463	463	461	470	472	438	2,7
		Differences	166	180	182	189	197	197	1,1
									1
	Blacksburg	FY 2009-14 WD	1,891	1,797	1,773	1,787	1,754	1,526	10,5
		Governor's Plan	2,957	2,957	2,945	3,003	3,018	2,793	17,6
		Differences	1,066	1,160	1,171	1,216	1,264	1,267	7,1
		Imv acces	1						
	Christiansburg	FY 2009-14 WD	838	796	785	791	776	672	4,6
		Governor's Plan	1,323	1,323	1,317	1,344	1,350	1,247	7,9
		Differences	484	527	532	553	574	576	3,2
	Calar	TEV 2000 44 W/D	207	244	207	200	202	204	10
	Galax	FY 2009-14 WD	327	311	307	309	303	264	1,8
		Governor's Plan	511	511	509	519	522	483	3,0
		Differences	184	200	202	210	219	219	1,2
	Martinsville	FY 2009-14 WD	717	682	674	679	667	582	4,0
	Ividi di isvilic	Governor's Plan	1,114	1,114	1,109	1,131	1,137	1,054	6,6
		Differences	396	431	436	452	470	471	2,6
		12.110.01.000	1						1
	Narrows	FY 2009-14 WD	104	98	97	98	96	83	5
		Governor's Plan	163	163	162	165	166	153	9
		Differences	59	64	65	67	70	70	3
		I=	1						
	Pearisburg	FY 2009-14 WD	133	126	125	126	123	107	1
		Governor's Plan	209	209	208	212	213	197	1,2
		Differences	76	83	83	87	90	90	5
	Dulasti	FV 2000 14 M/D	443	404	416	410	412	359	
- Appendix	Pulaski	FY 2009-14 WD		421	416	419	703		
		Governor's Plan Differences	689	689 268	686 270	700 281	292	652 292	4,1
		Differences	246	200	270	201	292	292	1,0
	Radford	FY 2009-14 WD	754	716	707	712	699	609	4,1
	radioid	Governor's Plan	1,177	1,177	1,172	1,195	1,201	1,112	55350
		Differences	423	460	465	483	502	503	
		1							1
	Roanoke	FY 2009-14 WD	4,515	4,292	4,236	4,268	4,190	3,648	25,1
		Governor's Plan	7,052	7,052	7,024	7,163	7,199	6,663	42,1
		Differences	2,537	2,760	2,788	2,895	3,009	3,016	17,0
	Rocky Mount	FY 2009-14 WD	209	198	195	197	193	166	
		Governor's Plan	333	333	331	338	340	313	1,9
		Differences	124	135	136	141	147	147	
	Salem	FY 2009-14 WD	1,196	1,136	1,121	1,129	1,108	963	(A)
		Governor's Plan	1,875	1,875	1,867	1,904	1,914	1,770	10000
	1	Differences	679	739	747	775	806	808	4,5

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

Virginia Department of Transportation and Virginia Rail and Public Transportation

Comparison of State Formula Allocations Planned in the Working Draft FY 2009 - 2014 Plan and

Governor's FY 2009 - 2014 Plan

All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name | Salem

(in thousands)

						in thousands)			
			Fiscal Year						
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
	Vinton	FY 2009-14 WD	377	358	353	356	349	303	2,096
		Governor's Plan	591	591	589	601	604	558	3,534
		Differences	215	233	236	245	254	255	1,438
	Total All Localities	FY 2009-14 WD	11,800	11,215	11,067	11,152	10,946	9,522	65,702
		Governor's Plan	18,456	18,456	18,381	18,746	18,838	17,433	110,311
		Differences	6,656	7,241	7,314	7,594	7,892	7,911	44,609
	Other Project Fund	ling to District	506	755	1,691	2,651	2,165	2.906	10,673
	Total per SYIP		12,306	11,970	12,758	13,802	13,111	12,428	76,375
All Highway		T	1						-
Systems	Total All Localities	FY 2009-14 WD	69,300	83,849	80,123	87,402	95,237	100,310	516,221
		Governor's Plan	96,052	113,086	109,532	117,894	126,736	130,775	694,077
	1	Differences	26,752	29,237	29,410	30,492	31,499	30,464	177,856
Transit	Operating	FY 2009-14 WD	2,403	2,504	2,568	2,638	2,720	2,775	15,608
	1.	Governor's Plan	3,287	3,578	3,615	3,671	3,732	3,813	21,696
		Differences	884	1,074	1,047	1,033	1,012	1,038	6,088
	Capital	FY 2009-14 WD	207	209	167	215	218	220	1,236
		Governor's Plan	242	252	209	256	258	261	1,478
		Differences	35	43	42	41	40	41	242
	Total	FY 2009-14 WD	2,610	2,713	2,735	2,853	2,938	2,995	16,844
		Governor's Plan	3,529	3,830	3,824	3,927	3,990	4,074	23,174
		Differences	919	1,117	1,089	1,074	1,052	1,079	6,330
Total Highway Construction and									
Transit	Total All Localities	FY 2009-14 WD	71,910	86,562	82,858	90,255	98,175	103,305	533,065
		Governor's Plan	99,581	116,916	113,356	121,821	130,726	134,849	717,251
		Differences	27,671	30,354	30,499	31,566	32,551	31,543	184,186

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.



SALEM DISTRICT

DRAFT FY09-14 SIX-YEAR IMPROVEMENT PROGRAM







Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



SALEM DISTRICT

PROJECT BENEFITS OF GOVERNOR KAINE'S TRANSPORTATION PROPOSAL







Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name Staunton

(in thousands)

			le:		(1	n thousands)			
Suetem	I coolib.	Varsies	Fiscal Year FY 2009 ¹	FY 2010 ²	EV 2044	EV 2042	EV 2012	EV 0011	0
System Interstate	Locality	Version FY 2009-14 WD		22,563	FY 2011	FY 2012	FY 2013	FY 2014	Grand Total
interstate	Staunton	Governor's Plan	25,217		22,293	29,755	25,320	12,796	137,94
	i	Differences	25,217	22,583	22,293	29,755	25,320 0	• 12,796 0	137,94
		Dillerences	1	0	0	- 0	0	0	
Primary	Staunton	FY 2009-14 WD	9,269	8,095	7,810	7,837	7,681	6,111	46,80
		Governor's Plan	18,453	18,187	17,894	18,288	18,619	17,125	108,56
		Differences	9,184	10,092	10,083	10,450	10,938	11,014	61,76
	Other Project Fund	ling to District	4,573	2.843	6.473	4,998	6,891	3,479	29,25
	Tourist Troject Turic	ang to Diotriot	1,070	2,040	0,470	4,000	0,001	0,410	20,20
Secondary	Alleghany	FY 2009-14 WD	583	566	563	562	556	498	3,32
		Governor's Plan	879	888	888	900	907	850	5,31
	-	Differences	296	322	325	338	351	352	1,98
	Augusta	FY 2009-14 WD	2,961	2,881	2,882	2,833	2,814	2,523	16,89
	1	Governor's Plan	4,636	4,704	4,721	4,741	4,800	4,516	28,11
		Differences	1,674	1,823	1,839	1,909	1,986	1,993	11,22
	Bath	FY 2009-14 WD	315	301	299	294	289	247	1,74
		Governor's Plan	537	543	543	547	552	512	3,23
	-	Differences	222	242	244	253	263	264	1,48
	Clarke	FY 2009-14 WD	586	570	567	563	557	498	3,34
]	Governor's Plan	904	915	916	925	934	876	5,47
		Differences	318	346	349	362	377	378	2,13
	Frederick	FY 2009-14 WD	2,640	2,577	2,570	2,552	2,530	2,279	15,14
	1 TOGOTION	Governor's Plan	3,995	4,052	4,058	4,096	4,136	3,890	24,22
		Differences	1,354	1,474	1,488	1,544	1,606	1,611	9,07
	Highland	FY 2009-14 WD	265	249	247	220	222	400	4.40
	riigilialiu	Governor's Plan	503	509	508	238 510	233 515	189 473	1,42 3,01
		Differences	238	259	261	271	282	283	1,59
		12	1		201		202	200	1,00
	Page	FY 2009-14 WD	826	803	802	791	785	704	4,71
		Governor's Plan	1,283	1,301	1,304	1,312	1,327	1,248	7,77
		Differences	457	498	502	521	542	544	3,06
	Rockbridge	FY 2009-14 WD	1.083	1,045	1,043	1,021	1,011	868	6,09
16475	21	Governor's Plan	1,779	1,804	1,808	1,815	1,837	1,716	10,75
		Differences	696	758	765	794	826	829	4,66
	Rockingham	FY 2009-14 WD	2,653	2,581	2,580	2,537	2,519	2,258	15,12
	Rockingham	Governor's Plan	TO 10 10 10 10 10 10 10 10 10 10 10 10 10	4,218	4,232	4,251	4,303	4,048	25,21
		Differences	4,156 1,504	1,638	1,652	1,715	1,784	1,790	10,08
		Dinordinos	1,004	1,000	1,002	1,710	1,704	1,700	10,00
	Shenandoah	FY 2009-14 WD	1,437	1,391	1,395	1,346	1,337	1,174	8,08
		Governor's Plan	2,438	2,481	2,494	2,487	2,525	2,366	14,79
		Differences	1,001	1,091	1,099	1,141	1,188	1,192	6,71
	Warren	FY 2009-14 WD	831	809	807	796	790	707	4,74
	Trui on	Governor's Plan	1,292	1,311	1,315	1,323	1,338	1,257	7,83
		Differences	462	503	507	527	548	550	3,09
	Total All Land	EV 2000 44145	44.400	40.770	40.750	40.500	40 100	44.005	00.55
	Total All Localities	FY 2009-14 WD	14,180	13,773	13,756	13,532	13,422	11,965	80,62
		Governor's Plan Differences	22,402 8,222	22,727 8,953	22,788 9,032	22,907 9,375	23,175 9,754	21,752 9,787	135,75 55,12
		4=	0,222	0,000	5,002	5,010	0,704	0,101	55,12
	Other Project Fund		479	8,101	7,203	7,072	4,503	5,524	32,88

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

^{2 -} Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name Staunton

(in thousands)

	I seelit :	Version	Fiscal Year FY 2009 ¹	FY 2010 ²	EV 2044	EV 2042	EV 2042	EV 2011	Conni Tri
stem	Locality	Version			FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota
ban	Bridgewater	FY 2009-14 WD	255	242	239	241	236	205	1,41
		Governor's Plan	402	402	400	408	410	379	2,40
		Differences	147	159	161	167	174	174	983
	Buena Vista	FY 2009-14 WD	310	295	291	293	287	249	1,72
		Governor's Plan	488	488	486	496	498	461	2,91
		Differences	178	193	195	203	211	211	1,19
		I=							
	Clifton Forge	FY 2009-14 WD Governor's Plan	199 308	189 308	187 307	188 313	185 315	162 292	1,11
		Differences	110	119	120	125	130	130	73
	Covington	FY 2009-14 WD	290	276	273	275	270	236	1,62
	1	Governor's Plan	449	449	448	456	459	425	2,68
	-	Differences	159	173	175	182	189	189	1,06
	Elkton	FY 2009-14 WD	115	109	107	108	105	90	63
		Governor's Plan	187	187	186	190	191	175	1,11
		Differences	72	78	79	82	85	85	48
	Front Royal	FY 2009-14 WD	679	645	636	640	628	543	3,77
		Governor's Plan	1,074	1,075	1,070	1,091	1,096	1,012	6,41
	-	Differences	395	430	434	451	469	470	2,64
	Grottoes	FY 2009-14 WD	104	98	97	98	96	83	57
		Governor's Plan	163	163	162	165	166	153	97
		Differences	59	64	65	67	70	70	39
	Harrisonburg	FY 2009-14 WD	2,060	1,954	1,926	1,940	1,901	1,640	11,42
	riamsonburg	Governor's Plan	3,273	3,274	3,259	3,324	3,339	3,082	19,55
		Differences	1,213	1,320	1,333	1,384	1,438	1,442	8,13
	Lexington	FY 2009-14 WD	341	323	319	321	315	273	1,89
	A .	Governor's Plan	538	538	535	546	549	507	3,21
		Differences	197	214	217	225	234	234	1,32
	Luray	FY 2009-14 WD	234	222	219	221	217	189	1,30
	Luray	Governor's Plan	366	366	365	372	374	346	2,18
	ļ	Differences	132	144	145	151	157	157	
	Jon Scaled		2		DW1				A Prije
	Staunton	FY 2009-14 WD	1,119	1,064	1,051	1,059	1,040	907	6,23
		Governor's Plan	1,741	1,741	1,735	1,769	1,778	1,647	10,41
		Differences	622	677	684	710	738	740	4,17
	Strasburg	FY 2009-14 WD	201	191	188	189	186	161	1,11
		Governor's Plan	318	318	316	323	324	299	- California
		Differences	117	127	128	133	139	139	
		TEV 0000 1111E		0.40	000	007	202	mm /	
	Waynesboro	FY 2009-14 WD	961	913	900	907	890	771	5,34
		Governor's Plan Differences	1,515 554	1,515 602	1,509 608	1,539 632	1,546 657	1,429 658	
		Dillerences	334	002	000	032	037	030	3,71
	Winchester	FY 2009-14 WD	1,196	1,135	1,119	1,127	1,104	953	3 (5.0)
		Governor's Plan	1,899	1,899	1,891	1,928	1,937	1,788	11,34
	1	Differences	703	764	772	802	833	835	4,70

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality

is expected to be minimal, on average the reductions would be approximately \$30,000.

Virginia Department of Transportation and Virginia Rail and Public Transportation Comparison of State Formula Allocations Planned in the Working Draft FY 2009 - 2014 Plan and Governor's FY 2009 - 2014 Plan All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

District Name Staunton

(in thousands)

						in thousands)			
			Fiscal Year						
System	Locality	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota
	Woodstock	FY 2009-14 WD	198	188	186	187	183	158	1,101
A Profession		Governor's Plan	314	314	313	319	321	296	1,877
		Differences	116	126	127	132	137	138	776
9	Total All Localities	FY 2009-14 WD	8,263	7,845	7,736	7,793	7,643	6,618	45,899
		Governor's Plan	13,036	13,038	12,981	13,239	13,302	12,291	77,888
		Differences	4,773	5,192	5,245	5,446	5,660	5,673	31,989
	Other Project Fund	ing to District	1,616	2,133	87	87	83	636	4,641
All Highway			1						
Systems	Total All Localities	FY 2009-14 WD	63,597	65,355	65,357	71,074	65,541	47,130	378,054
		Governor's Plan	85,777	89,592	89,717	96,345	91,893	73,603	526,928
		Differences	22,180	24,238	24,360	25,271	26,352	26,474	148,873
Transit	Operating	FY 2009-14 WD	903	941	965	991	1,022	1,043	5,865
		Governor's Plan	1,235	1,344	1,358	1,379	1,402	1,433	8,151
		Differences	332	403	393	388	380	390	2,286
	Capital	FY 2009-14 WD	847	856	684	879	892	899	5,057
		Governor's Plan	991	1,030	854	1,046	1,056	1,068	6,045
		Differences	144	174	170	167	164	169	988
	Total	FY 2009-14 WD	1,750	1,797	1,649	1,870	1,914	1,942	10,922
		Governor's Plan	2,226	2,374	2,212	2,425	2,458	2,501	14,196
		Differences	476	577	563	555	544	559	3,274
Total Highway Construction and			1						
Transit	Total All Localities	FY 2009-14 WD	65,347	67,152	67,006	72,944	67,455	49,072	388,976
		Governor's Plan	88,003	91,966	91,929	98,770	94,351	76,104	541,124
		Differences	22,656	24,815	24,923	25,826	26,896	27,033	152,147

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session will be adjourned, the effective date of the Governor's Plan is uncertain.

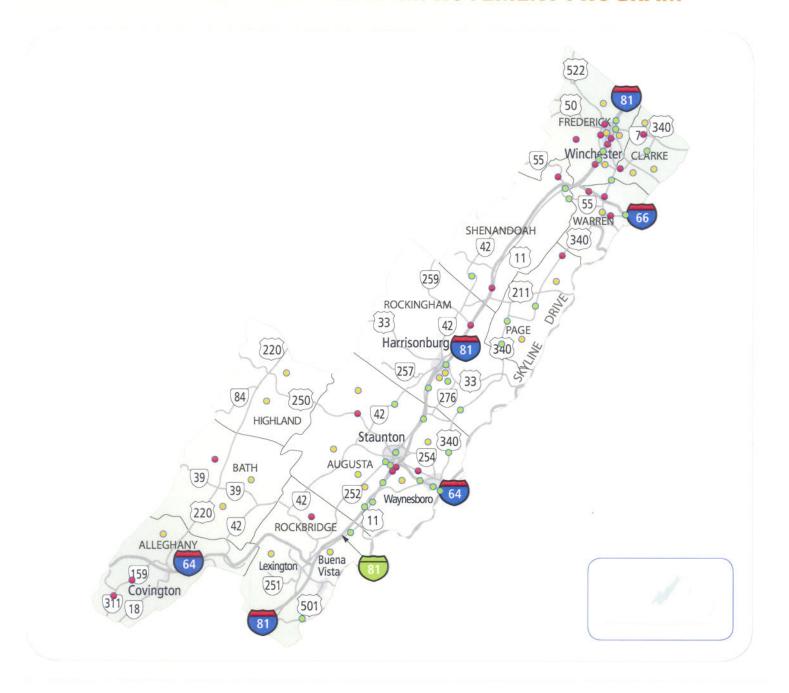
2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality

is expected to be minimal, on average the reductions would be approximately \$30,000.



STAUNTON DISTRICT

DRAFT FY09-14 SIX-YEAR IMPROVEMENT PROGRAM



LEGEND



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



Northbound Truck Climbing Lane Improvement



STAUNTON DISTRICT

PROJECT BENEFITS OF GOVERNOR KAINE'S TRANSPORTATION PROPOSAL



LEGEND



Advertised/Completed Projects in the Draft FY09-14 Six-Year Improvement Program



Delayed Projects in the Draft FY09-14 Six-Year Improvement Program



Cancelled/Unfunded Projects not in the Draft FY09-14 Six Year Improvement Program



Virginia Department of Transportation and Virginia Rail and Public Transportation Comparison of State Formula Allocations Planned in the Working Draft FY 2009 - 2014 Plan and Governor's FY 2009 - 2014 Plan

All Highway Construction Funds (State, Federal, Bond funds for Federal Matching, Unpaved, Tele Fees) and Transit

(in thousands)

				4	(in thousands))		
		Fiscal Year						
System	Version	FY 2009 ¹	FY 2010 ²	FY 2011	FY 2012	FY 2013	FY 2014	Grand Tota
Interstate - Does		1						1
not include	FY 2009-14 WD	365.022	340.938	331,363	396,225	327,900	274,935	2,036,38
Regional	Governor's Plan	365,022	340,938	331,363	396,225	327,900	274,935	2,036,38
Package	Differences	0	U	0	0	0	0	the state of the s
		-						
Primary - Does	FY 2009-14 WD	103,401	94,768	91,366	91,501	87,180	64,647	532,863
not include	Governor's Plan	202,970	203,082	200,774	205,096	205,238	182,985	1,200,145
Regional	Differences	99,569	108,315	109,408	113,595	118,059	118,338	667,283
Package	Other Project Funding	256,831	207,752	140,194	146,656	159,787	133,083	1,044,303
Secondary - Does	FY 2009-14 WD	139,768	134,324	133,021	131,852	129,618	111,907	780,490
not include	Governor's Plan	229,698	232,209	231,822	234,415	236,277	218,881	1,383,302
Regional	Differences	89,930	97,885	98,801	102,563	106,659	106,974	602,812
Package	Other Project Funding	45,254	38,881	32,622	27.845	22,442	24,461	
1 denage	Cottler Project runding	45,254	30,001	32,022	21,045	22,442	24,461	191,506
Urban - Does not	FY 2009-14 WD	93,287	87,022	84,740	85,050	82,098	65,472	497,669
include Regional	Governor's Plan	167,963	168,258	166,796	170,246	170,642	154,225	998,131
Package	Differences	74,677	81,236	82,056	85,196	88,544	88,753	500,462
	Other Project Funding	82,934	45,657	20,184	32,086	17,804	10,892	209,558
All Highway	1							-
Systems - Does		1						
not include	FY 2009-14 WD	1.086,497	949,343	833,490	911,215	826,829	685,397	5,292,771
Regional	Governor's Plan	1,350,673	1,236,778	1,123,756	1,212,569	1,140,090	999.462	7,063,328
Package	Differences	264,176	287,436	290,265	301,354	313,261	314,065	1,770,557
Taonage	Directorices	204,170	207,430	230,203	301,334	313,201	314,003	1,770,337
Transit - Does not								
include Regional	FY 2009-14 WD	218,408	224,607	209,215	234,171	239,855	243,558	1,369,814
Package	Governor's Plan	280,332	299,855	282,570	306,505	310,789	316,306	1,796,357
	Differences	61,924	75,248	73,355	72,334	70,934	72,748	426,543
Total Highway								
Construction and		1						
Transit - Includes	FY 2009-14 WD	1,304,905	1,173,950	1,042,705	1,145,386	1,066,684	928,955	6,662,585
Regional	Governor's Plan	2,105,205	2.080.233	1,976,526	2,113,874	2,070,579	1,957,168	12,303,585
Package	Differences	800,300	906,284	933,820	968,488	1,003,895		5,641,000
ackage	Dillelelices	000,300	900,204	933,620	900,468	1,003,695	1,028,213	1 5,041,000

^{1 -} Actual revenues that would result from the Governor's Plan could be different than shown because it is not known when the Special Session

will be adjourned, the effective date of the Governor's Plan is uncertain.

2 - Actual revenues that would result from the Governor's Plan will be slightly reduced from revenues shown. The revenue impact per locality is expected to be minimal, on average the reductions would be approximately \$30,000.

VDOT Innovation and Accountability

- See nationally-recognized public-private partnership program \$9 billion in projects underway
- Eliminated \$867 million in accrued project deficits
- Dramatically improved project delivery
 - o On-time delivery increased from 20% to 90%
 - o On-budget delivery increased from 51% to 90%
 - Springfield Interchange, Pinners Point, Wilson Bridge, and Battlefield Boulevard
- Outsourced 1,118 miles of interstate maintenance
- 2,000 fewer employees 10,500 to 8,500
- 87 fewer maintenance facilities 335 to 248
- See national awards
 - Wilson Bridge
 - o Fleet management
 - o Knowledge management
- VDOT audits and reviews
 - See 2001 Joint Legislative Audit and Review Commission report entitled Adequacy and Management of VDOT's Highway Maintenance Program
 - See 2002 Auditor of Public Accounts report entitled Special Review of Cash Management and Capital Budgeting Practices

- See 2004 Auditor of Public Accounts report entitled Follow-Up of the Special Review of Cash Management and Capital Budgeting Practices
- See 2005 Joint Legislative Audit and Review Commission briefing on VDOT maintenance program
- o 2002 to 2008 annual audits of VDOT by Auditor of Public Accounts
- See 2007 legislation requiring submission of VDOT maintenance budget and needs to Joint Legislative Audit and Review Commission and VDOT's Biennial Report on the Condition and Performance of Surface Infrastructure in the Commonwealth of Virginia
- See 2007 Reason Foundation report entitled 16th Annual Report on the Performance of State Highway Systems



DOT 81-08 Thursday, June 12, 2008 Contact: Ian Grossman Tel.: 202 253 0901

Historic Financing Completed: \$589 Million in Private Activity Bonds Issued to Fund I-495 Congestion-Relief Project U.S. Department of Transportation Grants First Use of Authority

WASHINGTON – Capital Beltway drivers are one step closer to a smoother commute today after \$589 million in tax-exempt private activity bonds were issued for the first time ever by sponsors of the I-495 Capital Beltway High Occupancy Toll (HOT) Lanes Project in Northern Virginia, announced Transportation Secretary Mary E. Peters.

"This financial transaction represents a historic turning point not only for the way we finance highway projects but also for the thousands of drivers who lose precious time stuck in traffic on one of the nation's most congested highways," Secretary Peters said.

The \$589 million in private activity bonds, issued by the Capital Beltway Funding Corporation, a non-profit Virginia corporation, is part of an estimated \$1.9 billion finance package to fund the 14-mile project. It includes two new variably priced HOT lanes in each direction to be added to the Capital Beltway between Georgetown Pike and the Springfield Interchange. Once construction is finished in 2012, there will be two additional lanes on each side of the Beltway. The two existing middle lanes would then be converted to HOT lanes with prices that vary depending on traffic volume – ensuring that traffic in these lanes keeps moving at all times.

Two private companies, Transurban and Fluor Enterprises, will finance, operate and maintain the express lanes using facility revenues to repay the \$589 million in private activity bonds as well as a \$589 million U.S. DOT direct loan. The loan was made through the Department's Transportation Infrastructure Finance and Innovation Act loan program, which encourages private sector participation in the financing of highway projects with flexible repayment terms. The Commonwealth of Virginia is also providing significant resources to this historic public-private partnership.

As part of the surface transportation legislation signed in August 2005, private companies building and operating public use facilities are authorized to borrow up to \$15 billion nationwide on a tax-exempt basis to build highways and certain freight facilities. So far, the Department has authorized the issuance of \$5.6 billion in these private-activity bonds to seven projects around the country, including the Capital Beltway HOT Lanes. However, this is the first time such bonds have actually been issued.

###

Briefing Room

Virginia's Public-Private Partnership (P3) Program

- Virginia Public-Private Program Has Several Components:
- Transportation Partnership Opportunity Fund
- Rail Enhancement Fund
- Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA)
- Public-Private Transportation Act of 1995 (PPTA)
- transportation program: Common policy goals with other components of Commonwealth's
- Public benefit and clearly articulated public need for the project
- Private resources or risk sharing to help address public need
- More timely
- Less costly
- Commonwealth resources focused on program management not project delivery
- Transparency and accountability

PPTA Program Requirements

- Since 2005, the PPTA law has been updated to strengthen program
- **Current Program Requirements:**
- sharing Requires commitments or guarantees by private sector – mandatory risk
- Rejects unsolicited proposals which do not include private risk
- Identifies timelines and activities within each phase of the P3 procurement
- Allows for interim agreements to accelerate required activities
- Requires ability to use federal funding

Public-Private Partnership Program Requirements, cont'd

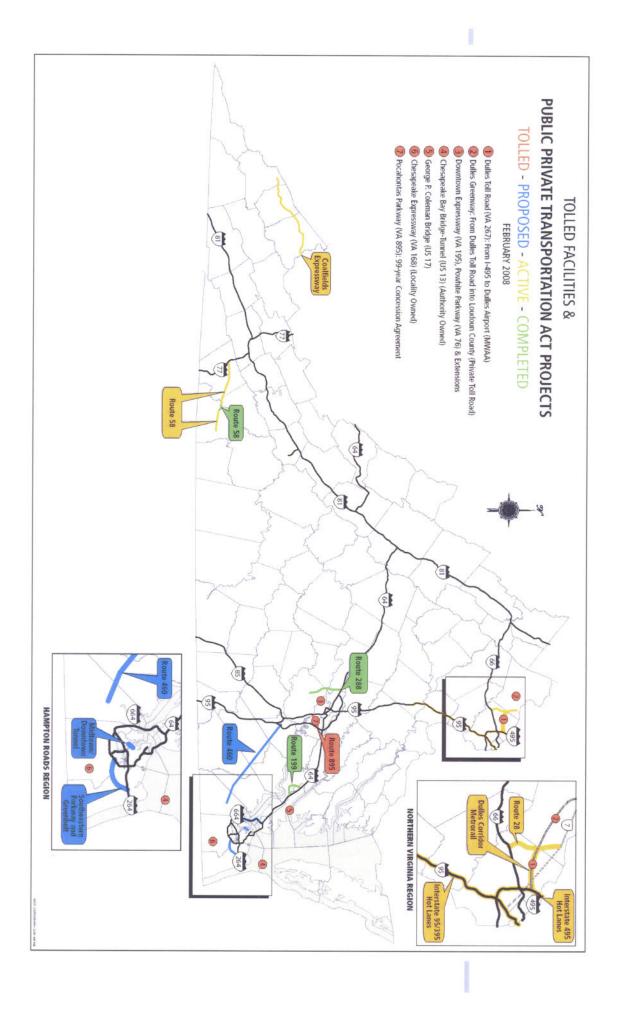
- Public involvement and transparency
- NEPA
- Tolling policy
- Independent Review Panel approval and recommendations
- Formal public comment periods
- http://www.vdot.virginia.gov/business/ppta-default.asp
- Information readily available on guidelines
- Active projects; anticipated projects
- Consultants
- Conflict of Interest

Rail Enhancement Fund (REF) & Transportation Partnership Opportunity Fund (TPOF)

- Funds established to provide public sector funding to complement private sector
- REF financed with vehicle rental tax approximately \$25 million a year
- Recommendations from Rail Advisory Board
- Partially funds passenger and freight rail
- Leverage private funding for public benefit
- with \$27 million in REF funding For example, Heartland Corridor is a public-private partnership of more than \$350 million
- Expressway, Rolls Royce, and Canon build, and economic development projects, including Route 28, Coalfields TPOF capitalized with \$50 million in one-time funding – used for PPTA, design-

Tolling & Concessions

- transportation needs Since 2003, joint work with legislature on expanding use of tolls to address
- Require open road tolling technology along with enhanced enforcement
- Closely linked to transportation alternatives transit and rail
- Closely linked to an alternative "free" solution
- Closely linked to providing solutions within a "reasonable" footprint
- General Assembly has also limited use of tolls in I-81 corridor
- only in the transportation corridor for programs and projects that benefit "payers" construction/maintenance/performance - law requires that any payment be used With concessions – the lease of an infrastructure asset in return for private
- bicycle and pedestrian improvements; additional transit services; HOV Examples include federal match to other projects along adjoining corridors;
- federal law require new capacity to be provided in order to toll Federal interstate tolling requirements vary by "project qualification" and state and



Status of P3 Projects Under Agreement – \$9 billion in construction

Route 58	Route 288	Jamestown 2007	Coalfields Expressway	APM/Maersk Private Port Terminal	Route 28	Pocahontas Parkway	
4	۷	۷		<	~	~	Construction complete
V					d.	۷.	Phase Two underway
9			d.				Begin construction in 2008
			~			ν.	Reassigned from original private partner
√-risk	√ - pavement risk		√ - equity	√ - equity and risk	√ - tax district	√ - equity and risk	Private Investment
						۷	Concession Agreement

Status of P3 Projects Under Agreement – \$9 billion in construction

I-495 HOT Lanes	Dulles Rail	Heartland Corridor	
			Construction
			Phase Two underway
۷.		۷	Begin construction in 2008
			Reassigned from original private partner
√ - equity and risk	√ - tax district and risk	√ - equity and risk	Private Investment
۷			Concession Agreement

P3 Program Status

Since 2002, 4 projects which were being pursued as a P3 have stopped

- I-81 Corridor private sector withdrew; will pursue design-build
- Western Transportation Corridor; no private interest
- private sector investment Hampton Roads Third Crossing; public sector funding required in addition to tolls and
- public entity Powhite Parkway Western Extension; private sector did not recognize responsible

Three projects are under active P3 procurement - \$4 billion in construction

- I-395/I-95 HOT Lanes studies indicate that tolls can support
- that tolls can support cost of construction, maintenance and operations Downtown/Midtown Tunnels/Martin Luther King Freeway Extension – studies indicate
- Route 460 public sector funding required in addition to tolls and private sector investment; without public sector funding procurement process will stop



CONTINUING THE JOURNEY

VDOT Improvements Since 2002

VDOT is on a journey of innovation and improvement to become a 21st century transportation mobility agency. For VDOT, this journey began in 2002 with our efforts to improve our business and deliver a world-class transportation program on time and on budget. The accomplishments outlined in this publication chronicle the steps that have led us so far on this journey.

February 2007



VDOT FAST FACTS

VDOT maintains the third-largest state-maintained highway system in the nation, including:

- · Nearly 58,000 miles of roadway
- 20,000 bridges and culverts
- 6 tunnels
- · 3 toll facilities
- 4 ferry services
- 41 safety rest areas and 10 welcome centers
- 107 commuter parking lots
- · 212 million vehicle miles traveled annually
- · Approximately 8,800 employees

VDOT BUDGET AND FUNDING

FY 07 budget of \$3.8 billion

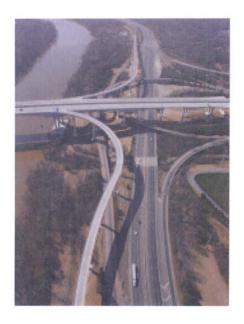
- \$1.5 billion for maintenance
- \$1.2 billion for operations, debt service, payments to agencies, administration
- \$1.1 billion for system construction

Funding Sources

- Federal Sources (\$1.159 billion)
- State Motor Fuel Tax (\$844 million)
- State Motor Vehicle Sales & Use Tax (\$575 million)
- State Motor Vehicle Licenses (\$166 million)
- .5% of the State General Sales & Use Tax (\$407 million)
- Other Revenue Sources (\$639 million)

RESHAPING THE TRANSPORTATION SYSTEM

- Successfully integrated public-private partnerships into our program:
 - Completed Virginia's first (and the nation's third) concession agreement, ceding operations and maintenance responsibility for the Pocahontas Parkway to Transurban. This saves taxpayers more than \$240 million in future maintenance costs
 - Solicited PPTA proposals to relocate and expand capacity on Route 460 east of Petersburg. Three proposals are under review.
 - Signed an interim PPTA agreement with Fluor-Transurban to build the I-95/395 high-occupancy toll or "HOT lanes" project that will use congestion pricing to pay for road expansion and to control congestion in the nation's third most congested region
 - The I-495 HOT lanes project, also being built in partnership with Fluor-Transurban and funded partially by the budget surplus, will add four variable-toll lanes along a 12-mile section. The environmental documentation is complete, and VDOT and Fluor-Transurban are working to complete the finance plan.
- Delivered major projects on time and on budget to improve mobility throughout the Commonwealth. Major successes include:
 - Completed the first span of the Woodrow Wilson Bridge
 - Completed the first highway design-build project in Virginia, a new interchange to serve APM (Maersk) terminals in Portsmouth
 - In anticipation of Jamestown 2007, widened Route 199 to four lanes as a design-build project and finished 14 months ahead of schedule



The Pocahontas Parkway was VDOT's first PPTA project. VDOT signed its first-ever, and the nation's third, concession agreement in 2006, transferring operations and maintenance responsibility to Transurban.

- Completed the first phase of the Virginia Capital Trail, Virginia's first stand-alone bike and walking trail project
- Expanded Route 17 to four lanes through the environmentally sensitive Great Dismal Swamp. VDOT was nationally recognized for our environmental efforts on this project.
 - Recognized nationally by the Federal Highway Administration (FHWA) for protecting wildlife and preserving the ecosystem
 - Designated as an Exemplary Ecosystem Initiative
- Became one of the first state DOTs to establish a System Operations program that
 focuses on maximizing capacity of the existing highway network, increasing safety
 and using technology to address congestion along major travel corridors
- Implemented 511 to provide a one-stop shop for motorists to get the latest realtime traffic and travel information. This service is available by calling 511 from any phone in Virginia or logging onto www.511Virginia.org
- Outsourcing interstate maintenance by July 1, 2009, as directed by the Code of Virginia
 - 157 miles of interstate already outsourced
 - -668 miles scheduled to be advertised in FY07
 - -398 miles scheduled to be advertised in FY08
- Implementing the Governor's initiative to align land use and transportation
 planning activities legislation through requiring localities to work with VDOT in
 considering the traffic impact of development projects (Chapter 527 regulations)
- Pursuing a strategy offering to transfer maintenance and construction responsibilities to localities that wish to assume local control over transportation programs. These efforts include:
 - Executed an agreement that provides for the transfer of the Dulles Toll Road to the Metropolitan Washington Airports Authority after certain conditions are met
 - —Transferred Suffolk secondary road maintenance to the city of Suffolk
 - —Transferred Route 164 rail relocation project from Department of Rail and Public Transportation to Virginia Port Authority
 - Implemented transfer of construction responsibilities to eight localities in the First Cities initiative, representing 35 percent of state urban construction:
 - Harrisonburg, Bridgewater, Charlottesville, Hampton, Richmond, and Virginia Beach completed
 - Newport News and Lynchburg are under way
- Established three Highway Safety Corridors on areas of interstate with high accident rates
- Developed a new vision for I-81 that incorporates short-term safety improvements and rail upgrades, and identifies long-term highway needs



The Dashboard is VDOT's nationally recognized project management tool to let the public and VDOT leadership monitor the status of key metrics.

ORGANIZATIONAL EFFICIENCY AND EFFECTIVENESS IMPROVEMENTS

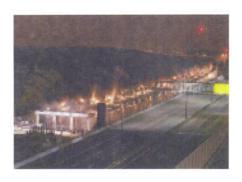
- Promoted accountability and improved transparency through the Dashboard, which enables the public to review VDOT's performance in critical service areas: construction, maintenance, finance, operations, safety, engineering and the environment
- Established on-time and on-budget performance goals for VDOT and realized significant improvement in the agency's program delivery:

MEASURE	2002	FY2007 YTD
Construction On-Time	20%	90%
Construction On-Budget	51%	90%
Maintenance On-Time	38%	79%
Maintenance On-Budget	59%	89%
Construction Quality (CQIP)	89.8%	90.9%

- Developed a Quarterly Report to convey our progress to the public and our stakeholders
- Improved data integrity for project management and cash management by establishing policies and procedures and assigned accountability
- Implemented an Asset Management System that tracks asset conditions
- Established pavement and bridge performance targets:

MEASURE	FY06 Results	FY07-08 Targets
% of Interstate Pavements Rated Deficient	17.1%	No more than 18%
% of Primary Pavements Rated Deficient	15.8%	No more than 18%
% of Bridges rated as Needing Repair/Rehabilitation	38.6%	No more than 40%

- Eliminated \$867 million of project deficits
- Improved internal financial controls implementing recommendations contained
 in the Auditor of Public Accounts' (APA) Special Review of Cash Management and
 Capital Budgeting Practices. In its 2002 audit, APA listed 50 findings. To date, all
 50 have been addressed and 21 have been resolved. A 2006 audit by the Auditor
 of Public Accounts found no reportable findings for VDOT.
- Guaranteed project budgets ensured that the total funds allocated to any
 highway construction project are equal to total expenditures within 12 months
 following completion of the project (per Section 33.1-12 of the Code of Virginia)



VDOT has completed the first span of the Woodrow Wilson Bridge on time and on budget. The demolition of the old bridge in August 2006 was an explosive milstone marking progress in this \$2.4 billion multi-state project, one of the largest in the nation.

- VDOT construction projects in excess of \$100 million have approved financial plans to ensure that necessary revenues will be available when the project is ready to proceed.
- Developed a Project Cost Estimation System to ensure reliable, consistent cost estimates on all projects
- Implemented an updated revenue estimating system based on the official state forecast by the Virginia Department of Taxation

WORKFORCE TRANSFORMATIONS

- Reduced number of employees from 10,192 in 2002 to approximately 8,800 today, the lowest level since 1965
 - The two state DOTs with larger highway systems, Texas and North Carolina, have 15,000 and 14,700 employees respectively.
 - Simultaneously, we are doing more with less, managing nearly 58,000 miles of highway today vs. 49,800 in 1965
- Streamlined VDOT's management structure to ensure that decision-making authority is assigned to the appropriate area.
 - —Transferring appropriate decision-making authority and accountability from headquarters to the field
 - Established Innovative Project Delivery and Innovative Project Finance business units to focus exclusively on developing the full potential of the Public-Private Transportation Act and finding new ways the private sector can help fund and deliver projects
- Consolidated maintenance facility operations from 335 locations to 248 to improve efficiency
 - Implemented a plan to reduce administrative overhead by eliminating 33 supervisory teams and corresponding administrative staff as part of our maintenance facility consolidation
 - Increased span of control for area superintendents to an average of 1:15 from as low as 1:8 in some areas
- Continued working to professionalize the workforce. For example, VDOT increased the number of positions required to be registered professional engineers from 4 to 271.
- Established a Knowledge Management program to capture and preserve knowledge of the most experienced employees
- Established an Executive Leadership program to develop VDOT rising stars into the agency's future leaders

VDOT On-Time and On-Budget Completed Construction Project Reported Res	-Time a	nd On-	3udget	Comple	eted Co	onstruc	tion Pr	oject Re	portec	Result	S	
October 6, 2007												
	FY 01	FY 01 FY 02	FY 03	FY	0	FY	- 1	FY	90	FY	07	FY 08
Performance Measure	$\overline{\text{FYE}^2}$	$\overline{\text{FYE}^2}$	FYE^{1}	Target		Target		Target	FYE^{1}	Target	FYE ¹	Target
Construction On-time	70%	30%		40%		%09		65%	84%	%02	%06	75%
Construction On-budget	51%	%19	%59	75%		%08		%08	%98	%08	%06	82%
Maintenance On-time Maintenance On-budget	38%	43%	38% 80%	%06 %09	51% 81%	70% 74% 90% 80%		75% 90%	%88 88%	75% 90%	80% 91%	%06 %06

¹ As reported in CTB Quarterly Report

² As reported in department historical records



Consolidation Update Area Headquarters

David S. Ekern, P.E. Commissioner
December 14, 2006



Effects of Implementation

248	335	Total Number of Facilities
192	224	Staffed Facilities
56	89	Other Properties/ Lots
16	39	Sub-AHQ
176	207	AHQ
Final Decision	Current State	Statewide Facilities

Total Number of Supervisory Teams	Statewide Supervisory Teams
214	Current State
181	Final Decision



News Release

May 1, 2008

John Undeland Woodrow Wilson Bridge Project 571 237-2690 Joan Buhrman American Society of Civil Engineering (703) 295-6406

Woodrow Wilson Bridge Project Wins the 'Oscar of Civil Engineering'

Highest Honor in Civil Engineering Awarded by the American Society of Civil Engineers

The Woodrow Wilson Bridge Project was awarded civil engineering's highest award last night as it took home the 2008 Outstanding Civil Engineering Achievement Award from the American Society of Civil Engineers (ASCE). Only two weeks before the second new bridge is dedicated, the project was presented the prestigious international honor at a gala awards ceremony in Arlington, Virginia. The project is sponsored by the Federal Highway Administration, Maryland State Highway Administration, Virginia Department of Transportation and the District of Columbia Department of Transportation.

The ASCE award recognized Wilson Bridge Project's significant contributions to the civil engineering profession, singling out for particular praise the project's innovative and extensive environmental program and its keen sensitivity to travelers and local communities. The project was selected from a group of 26 outstanding projects from around the world.

"I couldn't be more proud of our entire team for managing this project in an ontime, on-budget manner, while showing enormous care for the natural environment as well as our travelers and neighbors," said Robert Douglass, project director for the Maryland State Highway Administration. "The cooperation we have received from local jurisdictions and the public at large has been a critical contributor to our success."

Ronaldo "Nick" Nicholson, project director for the Virginia Department of Transportation, seconded his counterpart's sentiments: "I am deeply honored to receive the award on behalf of our talented team – designers, contractors and many others – but I would be remiss if I didn't emphasize the enormous credit deserved by our customers, the public, who have shown so much patience as we have built this monumental project."

"The success we have achieved could only have come with across-the-board partnership and hard work," Nicholson said. "We look forward to continuing that spirit of teamwork as we tackle the remaining portions of the project, particularly the Telegraph Road Interchange, which just this year began substantial construction."

- more -









ASCE annually recognizes an exemplary civil engineering project with the Outstanding Civil Engineering Achievement award. Established in 1960, the prestigious award honors the project that best represents civil engineering progress and its contribution to society as a whole.

Past notable winners include the St. Lawrence Seaway and Power Project on the St. Lawrence River, New York; the John F. Kennedy International Airport in Queens, New York; the Gateway Arch in St. Louis, Missouri; the Leonard P. Zakim/Bunker Hill Bridge in Boston; and the Trans-Alaskan Pipeline in Alaska.

The Wilson Bridge Project is now 80 percent completed. The second new Wilson Bridge will be dedicated on May 15 and open to traffic in late May/early June, weather permitting. On landside, the interchanges at U.S. Route 1, Interstate 295 and Maryland 210 will be completed in late 2008 or early 2009. The interchange at Telegraph Road will be finished in 2013.

##











40 How biofuels help emissions



46 Test drive new hydrostatic front-wheel drive



52 Compact, but not to be underestimated



COSSRUCIONE GUIDNE 2008 Construction Equipment.com

Since 1949

Ideas and Insight for the Equipment Pro

KOKOSING CONSTRUCTION COMPANY INC.

GENERAL CONTRACTORS

Fredericktown Ohio

%Fleet %Masters

Kokosing Construction & Virginia DOT named best fleets of the year p. 33

CLICK HERE TO

RENEW

your FREE magazine subscription CLICK HERE TO

START

a FREE <u>e-newsletter</u> subscription

Fleet Masters

By MIKE ANDERSON, Senior Editor



The Nation's

Fleet Masters
recognition honors
the expertise
needed to succeed
with mixed
equipment fleets



Top Fleets

hey call it a business. But the reality of trying to run a mixed fleet of on- and off-highway equipment in the most reliable and costeffective fashion is a multitude of businesses rolled into one.

This is precisely why the Association of Equipment Management Professionals (AEMP) and Construction Equipment created the annual Fleet Masters Award to recognize top-notch fleet professionals for managing just the right elements to maximize their organizations. That the discussion such recognition generates may also help others manage more productive fleets is at the very core of all AEMP efforts to support the equipment industry's best and brightest managers.

The following pages profile the organizations and their strategies that piloted the 2008 public- and private-fleet winners to the top of the Fleet Masters competition, including the first-ever, two-time Fleet Masters winner. The awards were presented at AEMP's 26th Annual Management Conference and Annual Meeting, held March 9-10, 2008, on the eve of Conexpo-Con/Agg 2008 in Las Vegas.

Fleet Masters was created by *Construction Equipment* and AEMP to honor those fleets exemplifying best practices in human relations, vendor relations, asset management, maintenance management and technology. Applications can be found at www.aemp.org. The Fleet Masters Award program is sponsored by Castrol, Caterpillar, John Deere, Komatsu, Manitowoc, Qualcomm and Volvo Construction Equipment.

If you know of an organization that should be considered for the next Fleet Masters competition, please go to www.aemp.org to find out how to submit a nomination. All equipment-managing organizations are welcome to enter the competition.

Fleet Masters: Government Fleet

A Little **Healthy Competition**

Measuring and reporting results throughout Virginia is key to continued success for VDOT's equipment-management team



Erle Potter. State Equipment Manager

on't tell Erle Potter there isn't competition within a public fleet. And, to prove the point, the Virginia Department of Transportation (VDOT) has again made Fleet Masters

history. The first public-fleet winner of a Fleet Masters Award in 2004, VDOT is now the firstever two-time winner of a Fleet Master Award, be it a public or private fleet.

For Potter, state equipment manager, the 2008 Fleet Masters Award is recognition that the business process plan for which the 2004 award was earned has, indeed, been put into

"The big thing that really helped us move to the next level was performance measurement and reporting. We started identifying things that we could measure in areas that needed improvement, and then we started measuring our accomplishments and reporting out those accomplishments," says Potter, PE, CEM. "That created competition among the nine districts.

"It goes back to the old saying that what gets measured gets done. We have a great deal of improvement in those areas in which we have measured and reported our accomplishments."

Within VDOT, semi-annual reports from the equipment-management team go to the state transportation commissioner, deputy commissioner, chiefs and district administrators. It was anticipated the latter officials would naturally, in turn, go straight to their equipment managers to ask why certain numbers weren't at the levels of other districts, says Potter.

"Those questions were asked," says Potter, "and those folks immediately focused their attention in the areas that needed improvement. As a result, the whole state has come up."

The very first result the state's equipmentmanagement team reported on was preventive maintenance — the goal being to hit 95 percent of all PM tasks on time.

"We had one district that was up around 99 percent, the others were in the 80s, and one district was much lower than that," recalls Potter. "After we started reporting and publishing that information, then the districts with the real low numbers came up into the 90s, and now to the point where they're all up in the 95-plus range."

Part of the method is a clear identification as to what Potter and his team is and does.

"I try to stay away from the term 'asset management,' because it's confusing. If you go to VDOT and you talk about asset management, they think you're talking about pavements and guardrails. I focus in on equipment management because that is what we do."

Hence, 37-year VDOT veteran Potter heads the equipment-management team - "it's exactly what it is," — comprised of two CEM-certified assistant state equipment managers, Richard Bonistalli and Larry Maready; technical consultant and CEM Commission member Blair Kinker; and the equipment managers of the nine districts. An award-winning technician training program has resulted in the largest



number of certifications among public agencies in the United States, and VDOT employees have won AEMP national technician-of-the-year awards more than a dozen times since 1989.

As with any public agency, VDOT walks a tightrope of sorts when it comes to managing assets. On one hand, residents of the Commonwealth of Virginia demand their hard-earned tax money be spent in the most prudent manner possible; on the other hand, it is likewise expected that full resources be instantly available when a bridge gives way to a flood or trees are blown across a highway. "It is a balancing act," says Potter, "to be lean enough to be cost-effective, but at the same time have enough resources available to respond to emergencies."

Part of the solution for the equipmentmanagement team has been the development of standing state-wide equipment rental agreements that naturally bring a better price via quantity, but are also based on a short-term concept, "so that if you need a piece of equipment for a day, then you don't have to rent it for the whole month," says Potter. "We've developed these contracts, put them out to bid, and have gotten some very good equipment, where the contract requires the equipment be delivered within so many hours of notice."

This has allowed for some older, idle equipment that would formerly be kept around "just in case" to be moved off the state's books.

Equipment owned by VDOT is rented to the particular district, as accounted for in the Members of the VDOT equipment-management team include, front row, from left: Larry Maready, Erle Potter, Richard Bonistalli, John H. Puzenski, James Pearman and John Brunette. Back row, from left: L.T. Williams, Kevin Holden, Bryan Maul, Carl Stevens, Blair Kinker and Jim Brewbaker. Absent: Charles Cheatham.

state-wide financial management system. That system in turn provides equipment-utilization data to the equipment-management system as part of an information network that allows for VDOT's financial-management, equipment-management and automated-fuel-management systems to share and leverage pertinent information.

And with the data in circulation, know that the competition is always on.

Virginia Department of Transportation

Headquarters: Richmond, Va.

Specialty: Construction, maintenance and operation of a state transportation network

Equipment Value: \$534 million

Fleet Makeup: 30,000 total items and 9,000 items of rolling stock representing all classes, including 3,300 light-duty trucks and 1,000 tractors/mowers

VDOT Equipment Program: 13-member equipment-management team headed by Erle W. Potter, state equipment manager, and including nine district equipment managers; the program is managed in a decentralized fashion through the district equipment managers, who report to the district administrators

Facilities: A central office in Richmond, supported by nine districts, with 72 total equipment maintenance shops

Market Range: Commonwealth of Virginia has the third largest state-maintained highway system, behind only Texas and North Carolina; VDOT owns, operates and maintains 57,867 miles of roads and supporting infrastructure

Construction Equipment.com Construction Equipment | June 2008



For more information, contact: Kate Hoagland Ash Institute 617-495-4347 kate hoagland@harvard.edu

HARVARD KENNEDY SCHOOL'S ASH INSTITUTE ANNOUNCES INNOVATIONS IN AMERICAN GOVERNMENT FINALISTS

Cambridge, Mass., – June 3, 2008 – The Ash Institute for Democratic Governance and Innovation at Harvard Kennedy School today announced the finalists for the 2008 Innovations in American Government Awards competition. These programs are models of government excellence, representing innovative programming from the local, county, city, tribal, state, and federal levels. The 15 finalists were selected from an initial pool of nearly 1,000 applicants. Winners of the 2008 Innovations Award will be announced in September 2008. Each of the six winners will receive \$100,000 toward the replication and dissemination of its innovation.

The Innovations in American Government Awards Program recognizes innovative government programs that tackle public problems and improve the lives of citizens. In honoring their innovations, the Program builds public confidence in government and fosters replication of best practices nationwide. These 15 finalist government programs address a host of pressing policy issues: prison reform, the immigrant workforce, nutrition in underprivileged areas, and juvenile delinquency. The finalist pool includes nine state programs, two city programs, and two federal programs, one school district, and one tribal government. The city of New York, Massachusetts, and Pennsylvania have multiple programs as finalists.

Finalists underwent seven months of rigorous evaluation by a host of policy analysts, government officials, and academic experts at both Harvard Kennedy School and institutions around the country. Over the last month, finalists have been visited by an Innovations policy expert. On June 12, 2008, programs will present their innovations

before the National Selection Committee, chaired by David Gergen, which will determine the 2008 winners. This free event is at Harvard Kennedy School and is open to the public. Presentations will also be available via live stream at http://video.ksg.harvard.edu:8080/ramgen/encoder/live.

"We are pleased to recognize these model initiatives of governments that are making a tangible difference in the lives of our citizens," said Stephen Goldsmith, director of the Innovations in American Government Awards Program. "By highlighting these inspiring programs, we hope to foster the replication of such innovations nationwide."

"The Innovations in American Government Awards program is at the forefront of honoring government at its best," said Gowher Rizvi, director of the Ash Institute for Democratic Governance and Innovation. "We commend their creativity, novelty, and munificent dedication to doing the public's business better and hope their achievements will rebuild confidence in government."

Established in 1985 at Harvard Kennedy School by the Ford Foundation, the Innovations in American Government Awards Program has honored 181 federal, state, and local government agencies over its 20 year history. The Program provides concrete evidence that government can work to improve the quality of life of citizens. Many award-winning programs have been replicated across jurisdictions and policy areas and serve as forerunners for today's reform strategies and new legislation.

The following government programs are finalists for the 2008 Innovations in American Government Awards:

ACCESS Plus

Commonwealth of Pennsylvania

ACCESS Plus delivers health care services to low income children and families, adapting incentives for prevention and disease management found in managed care to fee-for-service settings.

Acquisition Fund

City of New York, New York

The Acquisition Fund is a \$230 million partnership that finances the purchase of land and buildings for affordable housing. Private finance tools allow smaller developers to compete in a tough market.

Division of Youth Services

State of Missouri

The Division of Youth Services rehabilitates juvenile delinquents through small, humane treatment centers, characterized by rigorous treatment, education, and extensive family and community engagement. The "Missouri Model" has achieved cost effectiveness through transforming young people into law-abiding and productive citizens.

Fresh Food Financing Initiative

Commonwealth of Pennsylvania

The Fresh Food Financing Initiative increases access to fresh, affordable food by providing grants and loans to supermarkets and grocery stores in underserved communities.

Getting Ready: Keeping Communities Safe

State of Arizona

The Department of Corrections' real world re-entry effort, Getting Ready, begins the day inmates are admitted and continues throughout their sentence. This system-wide reform transforms prisons and improves long-term results.

Global Maritime Domain Awareness

United States Department of Transportation

Global Maritime Domain Awareness is a low cost, and rapidly deployed, global vessel traffic monitoring system that contributes to the maritime security and safety of the United States and its allies.

Intelligence Community Civilian Joint Duty Program

Office of the Director of National Intelligence

The Intelligence Community Civilian Joint Duty Program requires intelligence professionals to complete assignments outside their agency to achieve executive rank, with the goal of developing leaders who can break through stovepipes that prevented the intelligence community from "connecting the dots" prior to 9/11.

Knowledge Management

Commonwealth of Virginia

Knowledge Management supports the Virginia Department of Transportation by strengthening its ability to share critical knowledge and experiences of its employees to improve ongoing processes and products.

Learn and Earn

State of North Carolina

The Learn and Earn Initiative allows high school students to gain job skills, jumpstart their college education, and earn a four-year degree debt free.

MassDocs

Commonwealth of Massachusetts

MassDocs makes affordable housing development in Massachusetts easier by creating one set of loan documents that simplifies the closing process, saving time and money.

Project Zero

City of New York, New York

Project Zero, a juvenile justice reform initiative of the Department of Probation, offers family-focused, community-based programs as alternatives to juvenile incarceration.

Solid Waste and Energy Management

Yukon River Tribes

Sixty-six indigenous tribes and First Nations have improved the solid waste systems on the Yukon River through their BackHaul program, removing over 6 million pounds of hazardous materials and recyclables that would otherwise return to the mainland empty.

Teacher Residency

Boston Public School District, Massachusetts

Based on the medical residency model, Boston Teacher Residency employs a handson, in classroom approach to teacher training and preparation, recruiting and retaining teachers to work in the Boston Public School system.

Welcome Back Center

State of California

The Welcome Back Center assists internationally trained health professionals as they pursue re-entry into the health workforce.

Youth Leadership Advisory Team

State of Maine

The Youth Leadership Advisory Team engages youth in foster care with state and federal policymakers to create significant improvements in child welfare policies, legislation, and programs.

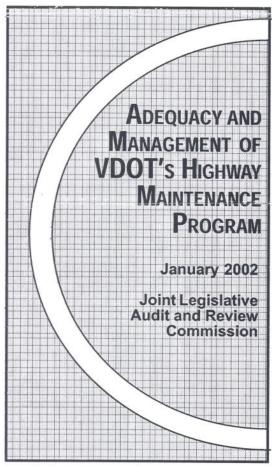
About the Ash Institute for Democratic Governance and Innovation

The Roy and Lila Ash Institute for Democratic Governance and Innovation advances excellence in governance and strengthens democratic institutions worldwide. Through its research, publications, leadership training, global network, and awards program – developed in collaboration with a diverse, engaged community of scholars and practitioners – the Ash Institute fosters creative and effective government problem-solving and serves as a catalyst for addressing many of the most pressing needs of the world's citizens. The Ford Foundation is a founding donor of the Institute. Additional information about the Ash Institute is available at www.ashinstitute.harvard.edu. Applicants for the 2009 Innovations in American Government Awards are encouraged to apply at www.innovationsaward.harvard.edu.

###

JOINT LEGISLATIVE AUDIT AND REVIEW COMMISSION OF THE VIRGINIA GENERAL ASSEMBLY Adequacy and Management of VDOT's **Highway Maintenance** Program A Report in a Series on Transportation Issues in Virginia

JLARC Report Summary



very year there are more roads added to Virginia's highway system, and every year the roads grow older. Thus, maintenance needs and associated costs will inexorably increase. The Code of Virginia requires the Virginia Department of Transportation (VDOT) to maintain the State's 56,700 miles major highways and local streets, 18,500 structures and bridges, and other assets such as tunnels, ferries, and rest areas. The Code of Virginia also requires the Commonwealth Transportation Board (CTB) to give priority to the funding needs related to the maintenance of the State's existing highway systems. In order to accomplish this mission, VDOT administers the maintenance program through staff in district offices, residency offices, and area headquarters around the State. VDOT currently employs a reactive maintenance approach to addressing problems as they arise, although it is trying to develop and implement a preventive approach, known as asset management.

In November 2000, the Joint Legislative Audit and Review Commission (JLARC) directed staff to undertake a review of the adequacy and efficiency of the highway maintenance program provided by VDOT. Concerns were raised by the Commission regarding the organization, management, and operations of VDOT's highway maintenance program. Specifically, those concerns focused on the department's prioritization of funding for the maintenance program, management of the program, and VDOT's development of an asset management strategy for highway maintenance.

This report presents the results of the JLARC staff assessment of VDOT's highway maintenance program. To complete the assessment, staff examined the management of the funding and other resources provided to VDOT for highway maintenance, performed site visits to all VDOT districts and several residencies and area headquarters within those districts, attended all seven monthly meetings of the Maintenance Program Leadership Group between February and August 2001, and conducted surveys of all residency maintenance operations managers and the cities and towns that receive payments from the State to maintain the streets in those localities.

The JLARC staff assessment has resulted in four major findings. First, Virginia's interstate and primary highway pavements are in generally good condition. Second, despite the generally good condition of interstate and primary system pavements, there are significant deficiencies on some of Virginia's highway assets. Approximately 20 percent of the pavements on the interstate and primary systems are considered deficient as determined by VDOT. About 40 percent of Virginia's bridges may be in need of repair or rehabilitation based on VDOT-calculated general bridge condition ratings. In addition, there is no statewide systematic approach for measuring the conditions of the pavements on the secondary roads, although about 70 percent of Virginia's lane mileage is on this system.

Third, costs associated with bringing the deficient pavements and bridges needing maintenance attention to an acceptable level are substantial. JLARC staff analysis indicates that addressing only the asphalt overlay needs of the deficient interstate and primary roads in Virginia would require more than \$100 million. In addition, bridge repair or replacement costs may be as much as \$1.52 billion, although some of that cost would likely be funded from the construction program. These estimated costs do not reflect repairs to the pavements on the secondary road system. Representatives of the cities, certain towns, and counties that receive payments from the State for the maintenance of the streets and roads in those jurisdictions indicated that there is also a substantial unmet funding need for maintenance of local roads, but this remains unclear because no standardized statewide assessments of the maintenance needs in these localities is performed by VDOT.

Given time, personnel, and funding constraints, it is not possible for the department to fully fund these needs in a single year. Therefore, the primary purpose of this analysis is not to establish specific funding recommendations to the General Assembly, but rather to assess the adequacy of current funding for meeting identified maintenance program needs over the long term.

Finally, VDOT's implementation of an asset management approach on a statewide

basis has been delayed several times and does not appear to be a current priority of the department. Because VDOT discontinued use of its prior system for measuring maintenance productivity in anticipation of the new approach, it is now left with no way to systematically assess the statewide needs or accomplishments of the overall maintenance program. Two automated systems for pavements and bridges do allow VDOT to perform some assessment of the conditions of these assets.

Several VDOT staff indicated that until the maintenance program can accurately address the conditions of the highway assets and assess what maintenance activities provide the greatest return on investment for the entire highway system, the maintenance managers will not be able to determine the true funding needs of the program. Although there is uncertainty surrounding when asset management will be implemented, there are additional management improvements the department could take now to improve the efficiency of the maintenance program.

This report provides a number of recommendations to address the issues that have been identified and highlights some of VDOT's accomplishments concerning highway maintenance.

Conditions of Virginia's Interstate and Primary Pavements Are Generally Good

Based on a condition assessment of data collected in 2000 by VDOT for a sample of the interstate and primary asphalt pavements, it appears these surface conditions are maintained to a sufficient level. The data sample consisted of 82 percent of all directional miles of interstate and primary pavements in Virginia, according to VDOT pavement management staff. As the table at the top of page III shows, only 20 percent of the pavements on the interstate and primary systems were rated as deficient based on criteria established by the department.

Total Deficient Miles of Asphalt Pavements by System in Directional Miles 2000

System	Total Sample Miles	Total Deficient Mileage		
Interstate	1,834	364		
Primary	9,328	1,842		
Total	11,162	2,206		

However, VDOT does not have a process in place to measure the pavement conditions on the secondary road system. During the summer of 2001, two districts began rating the conditions of the secondary road pavements for which they are responsible. However, a standardized approach was not established between the districts.

Recommendation. The Virginia Department of Transportation needs to conduct a more thorough review of the pavement conditions of all the highway systems in Virginia. For example, the department should rate the conditions of the total directional mileage for the interstate and primary pavements. In addition, VDOT should rate the pavement conditions of at least a representative sample of the secondary roads using the same rating scale as is used on the interstate and primary pavements. Finally, the overlay schedules should be developed using these ratings as a method for prioritizing repair activities.

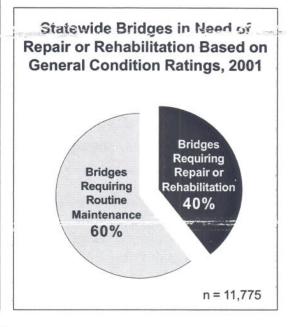
Forty Percent of Bridges Are in Need of Repair or Rehabilitation Based on General Condition Ratings

While interstate and primary asphalt pavements appear to be in relatively good condition, the State's bridges appear to have greater maintenance needs. Based on a JLARC staff analysis of general bridge condition ratings determined by VDOT, 40 percent of the State's more than 11,775 bridges are considered to be in need of some maintenance activity (see figure at right). Of the

bridges rated in need of repair or rehabilitation, 64 percent are located on the secondary roads system, 25 percent are on the primary system, and eleven percent are on the interstate system.

The majority of Virginia's bridges are required by the Federal Highway Administration to be inspected at least once every two years. Bridges with identified critical issues are required to be inspected every year. According to FHWA definitions, more than 4,500 Virginia bridges were rated as potential candidates for either minor or major rehabilitation.

In addition, more than 47 percent of Virginia's bridges were built prior to 1961, according to data supplied by VDOT. FHWA has recently recommended that bridges be built to a 75-year functional life, and VDOT



structure and bridge staff have stated that age is a significant component in identifying potential needs because bridge performance declines as concrete and steel elements approach the end of their useful structural life spans.

Costs to Address Current Maintenance Needs Could Be \$1.6 Billion

Further analysis of the pavement and bridge condition data indicates that projected costs associated with raising the condition ratings of these assets to a level identified as acceptable by VDOT and FHWA could reach more than \$1.6 billion. JLARC staff analysis identified the amount of funding needed to increase the condition of all deficient interstate and primary pavements to be about \$100 million. Projected bridge rehabilitation or replacement activities on the 40 percent of bridges identified as needing maintenance attention would cost more than \$1.5 billion. It should be noted that the estimated amount for bridges includes bridges already scheduled for replacement and those that would qualify for replacement, and bridge replacement is funded from construction allocations. However, these estimated costs are in addition to the costs of maintaining those pavements and bridges that are currently at an acceptable condition, and also do not include cost estimates for repairs on the more than 47,000 miles of secondary roads. In addition, 92 percent of the VDOT operations managers surveyed by JLARC staff said that maintenance funding is inadequate.

Current Maintenance Funding Appears Constrained, and Projected Funding May Be Low

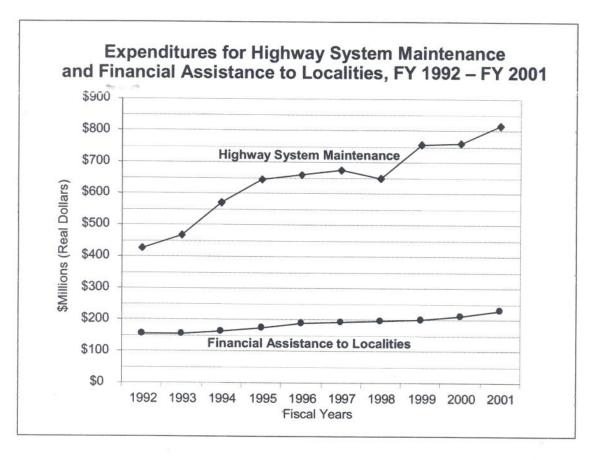
Despite these identified deficiencies, funding to address these needs has not been provided to the maintenance program for a variety of reasons. While the Code of Virginia requires funding for maintenance of the State's existing highway systems be the first

funding priority of all funds made available for highway purposes, it also leaves the determination of what is a "reasonable and necessary" amount for these functions to the Commonwealth Transportation Board. In the past several years, it appears that VDOT has constrained the level of funding available to the maintenance program for reasons that include cash flow difficulties, potential revenue shortfalls for the Highway Maintenance Operating Fund, and the desire to provide additional funding for the highway construction program.

The six-year allocation projections for the highway maintenance program appear to understate the funding that will eventually be required by approximately \$670 million. based on past VDOT expenditures (see figure on next page). These projections indicate that after receiving \$872 million in FY 2002 and \$855 million in FY 2003, maintenance will be allocated approximately \$861 million beginning in FY 2004 and continuing through FY 2007. Because the total amount of funding available for construction projects depends on the amount of funding left over after the funds are allocated for maintenance and other functions, projecting a level amount of funding for the maintenance program appears to provide extra funding for the construction program during those years.

However, not accounting for likely future increases in maintenance costs, such as those related to annual increases in fixed costs including labor, materials, and fuel, raises substantial questions regarding VDOT's commitment to maintaining the State's highway system as required by law. Moreover, this is not consistent with the history of maintenance expenditures in the previous six fiscal years.

Recommendation. The Commonwealth Transportation Board should review the current maintenance needs on Virginia's highways and bridges and use the information obtained from these condition assess-



ments in determining a reasonable and necessary amount of funding for maintenance of the State's existing highway systems.

VDOT's Oversight of Street and Road Maintenance Payments to the Localities Needs Improvement

Since 1997, Virginia has provided approximately \$1 billion to the cities, certain towns, and the counties of Arlington and Henrico for the purpose of maintaining streets and roads. While VDOT does not directly maintain the almost 10,000 center line miles of roadways in the urban system, it is responsible for distributing the State's payments to these localities as well as overseeing the quality of the maintenance being provided. Additionally, the State makes payments to the counties of Arlington and Henrico for maintenance of certain second-

ary roads. VDOT has no oversight responsibility for these roads, however.

Although the State has provided substantial funding for maintenance of the streets and roads in the urban system and the two counties, 76 percent of the recipients reel these payments were insufficient to meet locality identified maintenance needs. JLARC staff analysis of VDOT urban division accounting and expenditure annual reports indicates that from FY 1997 to FY 2000, cities and towns spent \$207 million more for maintenance than was received through State payments (see table on next page).

In 1996, §33.1-41.1 of the *Code of Virginia* was amended to allow cities and towns to use these payments for construction or reconstruction, as well as maintenance purposes. However, four of the six cities and

City and Town Expenditures for Maintenance Exceeded State Payments FY 1997 – FY 2000

<u>Function</u>	FY1997	FY1998	FY1999	FY2000				
Local Expenditures	\$214,127,191	\$225,666,006	\$239,753,255	\$ 231,407,520				
VDOT Payments	\$167,679,709	\$171,401,895	\$180,990,141	\$ 183,467,137				
Locality Difference	\$ 46,447,482	\$ 54,264,111	\$ 58,763,114	\$ 47,940,383				

towns contacted by JLARC staff indicated these payments were not used for activities that might otherwise be funded through the construction program. For example, street maintenance payments were used for construction of curb and gutter, turn lanes, and repair and replacement of sidewalks, as well as other ordinary maintenance activities such as mowing and ditching.

In addition, the Code of Virginia gives VDOT a very limited role in the amount of oversight it provides for maintenance of the streets in the cities and towns, and no responsibility for oversight of the maintenance of the secondary roads in the counties. If additional funding were to be provided to the localities for maintenance of their streets and roads, increased oversight and adequate reporting methods should be required.

Recommendation. The Virginia Department of Transportation should establish a systematic and regular review of pavement and bridge conditions in the localities as a way of identifying the maintenance functions and needs on the urban system and in the counties that have chosen to withdraw from the State-maintained system. This in-

formation should be reported to the General Assembly on a regular basis.

VDOT Has Not Implemented Asset Management

Implementation of asset management would provide VDOT with a much more accurate picture of highway maintenance needs and would greatly assist the CTB in determining a level of funding that is reasonable and necessary as required by the *Code of Virginia*. While VDOT was the first state department of transportation to award a long-term, performance-based contract for highway maintenance and has also proposed an asset management approach for highway maintenance using State forces, it has been unable to implement asset management on a statewide level.

To implement its asset management strategy, the department is developing several automated systems to collect, analyze, and forecast asset condition information and maintenance activities. Since beginning development of an asset management approach in 1996, VDOT has twice delayed the development of the Integrated Maintenance Management System (IMMS) that would be used to coordinate these functions

and the associated automated systems. To date, the department has spent about \$39 million on these systems since 1996. Several VDOT staff have indicated that IMMS is critical to achieving an outcome-based approach to maintenance, and providing the department with a statewide inventory and comprehensive condition analysis of its highway assets. Likewise, other automated systems have not been finalized and their full functionality remains unrealized.

Currently, the implementation of the IMMS requirements are being delayed as VDOT attempts to develop and award a contract for a department-wide system that would integrate all of VDOT's information systems. This new system initiative is supposed to include the same business requirements developed by the maintenance program for IMMS, but it is unclear what priority the maintenance program's needs related to asset management will have. Despite the importance of this system to the maintenance program, this initiative appears to be progressing without a clear plan or specific project estimates for costs of development and implementation.

Recommendation. The Virginia Department of Transportation needs to place a higher priority on the development and implementation of an asset management approach and the automated systems required. In addition, the department should continue to use the information being obtained through the Inventory and Condition Assessment System, and determine the minimum level of inventory collection and condition assessment needed to provide useful information for essential maintenance functions.

Resources for Highway Maintenance Functions Could Be Managed More Efficiently and Effectively

In light of the fact that the implementation of an asset management approach may not occur in the immediate future, it appears VDOT could improve its use of resources by addressing certain short-term management issues. Prior to the initial development of IMMP, the maintenance program evaluated the productivity of its staffing and the use of materials and equipment as components of its activity scheduling and funding needs. However, VDOT no longer performs that function, in part because maintenance managers expected IMMP to be fully implemented by now.

Moreover, the department would benefit from a strategy that addresses the availability of unused allocations from one fiscal year to the next. According to many of the maintenance engineers interviewed for this review, the inconsistency of carry-forward funds affects their ability to adequately plan and prioritize activities into the future.

Although VDOT produces a quarterly report listing underutilized rental equipment. it does not appear that maintenance managers in the field use this information to achieve better management of the use of rental equipment. Several maintenance managers indicated they did not use these reports. VDOT has tried to develop methods for reducing existing equipment stocks. During the past summer, the department contracted with John Deere, Inc. for a pilot project leasing tractors as a means of reducing costs and inused equipment. VDQTshould continue to develop strategies for reducing the amount of underused equipment in the field. For example, the department could better use the quarterly equipment utilization reports as a management tool for more efficiently providing pieces of equipment where they are needed.

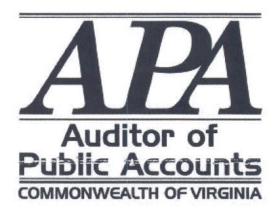
Interviews with maintenance managers also identified a need for greater technical assistance in providing maintenance functions. As part of the development of a new maintenance policy manual in 1994, the maintenance program indicated that a best practices manual would also be developed. The development and implementation of a

best practices manual would provide staff in the field with additional guidance and could lead to the introduction of innovative and more efficient approaches to highway maintenance activities. However, this manual was never completed.

Recommendation. The Virginia Department of Transportation should develop best practices for the major highway maintenance functions as soon as possible and provide adequate access and training as appropriate.

SPECIAL REVIEW OF CASH MANAGEMENT AND CAPITAL BUDGETING PRACTICES

VIRGINIA DEPARTMENT OF TRANSPORTATION RICHMOND, VIRGINIA



EXECUTIVE SUMMARY

The Virginia Department of Transportation's recent cash shortages resulted from a lack of cash and project management, and not matching construction projects in the Six Year Program to available resources. Transportation does not have a systematic way to identify its maintenance needs, and therefore cannot reasonably determine or quantify these maintenance needs. Compounding these issues is a complex collection of automated systems that do not consistently exchange data, and do not provide timely and accurate information to support Transportation's management needs.

The comments below summarize the process outlined in Chapter 8, Best Practices. This chapter outlines a process for Transportation to change how management approaches planning, budgeting, reporting, and project and budgeting oversight. Transportation's implementation of these recommendations will require substantial time and effort as well as the cooperation of the Commonwealth Transportation Board, the General Assembly, the Governor, and other state agencies and institutions.

Transportation should make cash management and budgeting a priority for the entire agency. This includes budgeting for all cash inflows and outflows including construction, maintenance, and administrative program sources and uses. As a result of this budgeting change, the General Assembly may wish to consider establishing a reserve fund similar to the Commonwealth's Rainy Day Fund for Transportation to compensate for economic changes. The proposed budget method matches anticipated payouts against anticipated cash flow, and results in the Six Year Program becoming a six-year capital budget.

The Commonwealth Transportation Board (CTB) should develop a prioritization method for project selection as required by the General Assembly. Given a limited pool of resources, and a virtually unlimited list of projects, the CTB must have a process to balance resources against needs and desires. By prioritizing a list of statewide projects and having more realistic project cost estimates, the CTB can provide the public with a transportation plan that allows for construction within available resource.

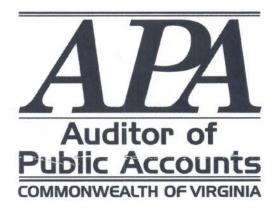
To achieve accountability with the cash management and budgeting process for both Transportation and the CTB especially within the Six Year Program, we recommend Transportation assign a project management team that follows a project from its inception to its completion. This team has responsibility for the project's development, construction, and progress. The team also reports the project's progress to management and the CTB and includes both the engineering and financial management of the project. The CTB should prepare and present a report to the General Assembly outlining what the Six Year Program achieved and its shortfalls.

The project team concept extends to Transportation's entire operations including maintenance where there is also a need to implement an asset management system. Transportation needs a sound working asset management system to assess and set its funding needs. In addition, this system should allow management to establish the same level of accountability envisioned for the Six Year Program.

To make any decisions properly, Transportation needs timely and accurate information. For proper communication to exist, Transportation must have systems that can interact and exchange information. Data should be reliable and data fields designed for compatibility. Systems should be user friendly and should provide management with timely, accurate, and easily available management reports. Transportation has taken steps toward an interim solution to their information needs problems with the creation of the Data Warehouse; however, the best practice is ultimately an enterprise solution.

FOLLOW-UP OF THE SPECIAL REVIEW OF CASH MANAGEMENT AND CAPITAL BUDGETING PRACTICES

VIRGINIA DEPARTMENT OF TRANSPORTATION RICHMOND, VIRGINIA



EXECUTIVE SUMMARY

Our review has found that Transportation has made significant progress or completed most of the recommendations made in our 2002 special report. Complete implementation of these changes will take at least four to five years.

Over the last two years, Transportation's management has started not only implementing recommendations, but more importantly begun implementing a change in the corporate and cultural structure of the organization. The success of change with Transportation will depend on whether a true structural change in organization takes place. The measure of success will require a substantial long-term commitment by management to not only making the change, but to prevent backsliding into Transportation's old approaches.

In some ways, the accomplishments to date are the easy part of change. The harder part lays ahead in funding and implementing new systems, continuing to make the changes to get closer to capital budgeting process, and overcoming Transportation's corporate and cultural structure to improve project management. The success of this effort is highly dependent on management guidance and direction, and current management has demonstrated their dedication towards this effort. If any management change occurs, it is essential that they have the same commitment; otherwise, progress may be negatively impacted.

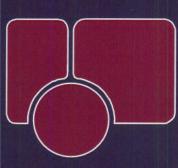
Transportation is restoring fiscal accountability by implementing several budgetary and financial changes, including adopting a debt management policy and model. Additionally, they are establishing a methodology to identify statewide transportation priorities and developing project management policies.

Transportation has completed several budgetary and financial changes, including attempts to make the Six-Year Improvement Program a realistic management tool and reduce the projects with a deficit status. However, to ensure accurate matching on cash inflows and outflows, Transportation must begin estimating the cost of projects by fiscal year. Transportation does not currently have sufficient controls and processes in place to manage the rate at which they spend funds.

For major projects, Transportation has begun assigning a project management team that follows a project from its inception to its completion. However, it is still too early in the process to determine if the policies put into place will provide Transportation with better project management. However, the actions to date are those considered best practices in both the private and public for large organizations.

Maintenance is still an area of concern at Transportation. The growing maintenance requirements and the limited ability to budget on a needs-based approach increases the risk of inappropriately applied funding. Once the asset management system is fully implemented a needs-based approach will be possible and Transportation will be able identify and prioritize maintenance projects.

Joint Legislative Audit and Review Commission of the Virginia General Assembly



VDOT Maintenance Program

Briefing to Senate START Task Force October 20, 2005

Hal Greer Division Chief, JLARC

Introduction

- Maintenance funding
- Asset management
- Current maintenance needs and allocations
- Local maintenance

Maintenance Prioritized in Statute

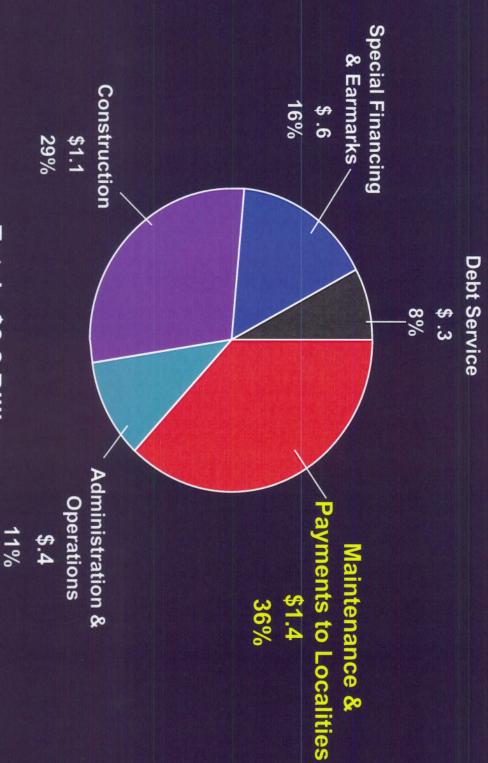
- Code of Virginia requires CTB to "allocate from all funds available for highway purposes such amount as it deems reasonable and necessary for the maintenance of the roads"
- Statutory requirement makes clear that to be prioritized over construction maintenance of existing highway infrastructure is
- However, there are no specific guidelines regarding what constitutes a "reasonable and necessary" amount to be set aside for maintenance

w

State-Maintained Road Network

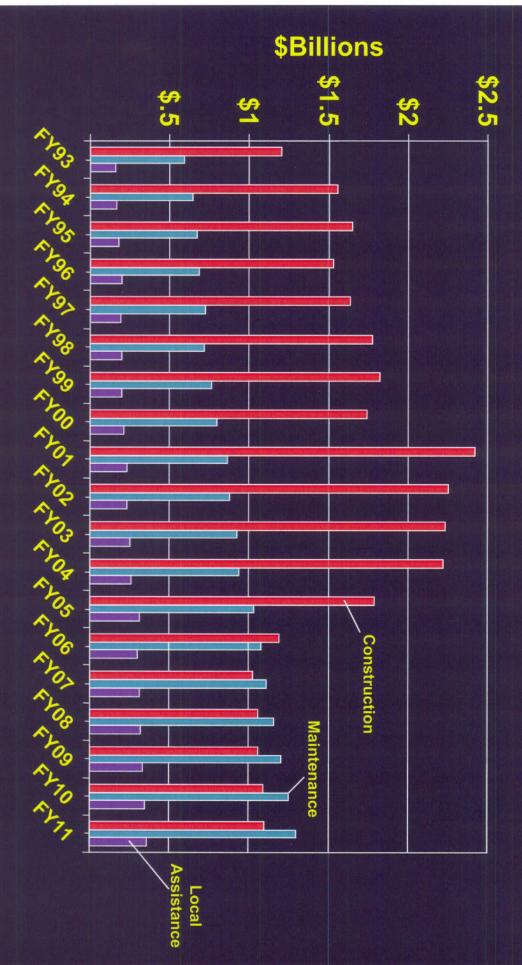
- Virginia has the third largest state-maintained highway system in the country
- Approximately 124,000 lane miles maintained by
- Almost 12,000 bridges maintained by VDOT
- 82 cities and 2 counties maintain their own fund their maintenance programs systems. They receive payments from VDOT to

FY 2006 VDOT Budget

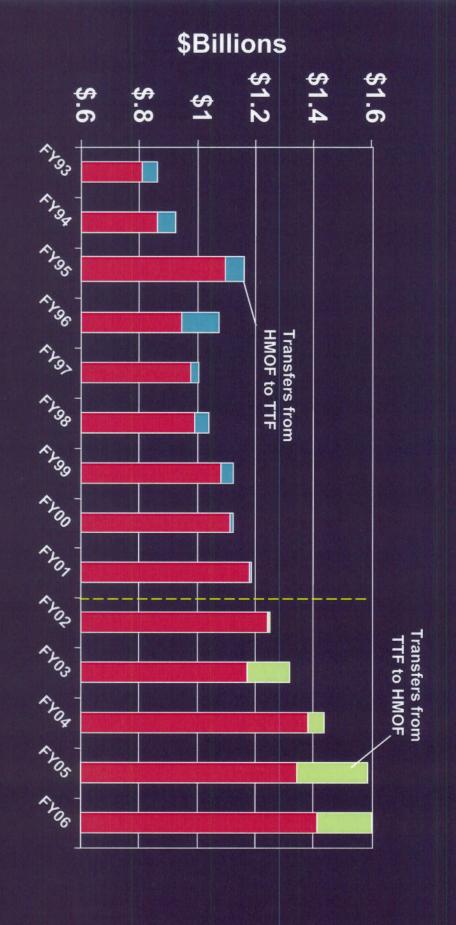


Total: \$3.8 Billion

Budgeted Maintenance Expenditures Have Surpassed Construction



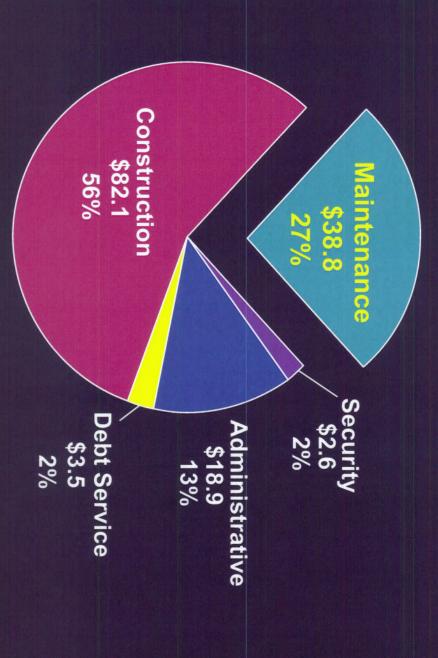
Highway Maintenance and Operating Fund No Longer Fully Pays for Maintenance



HMOF funds maintenance, local street payments, and administration.

20-Year Projected Maintenance Needs

8



Total: \$145.9 Billion

Source: VTrans 2025

ဖ

Maintenance Expenditures Have Increased at Greater Rate than Gas Tax Revenues

- grew by 2% per year during this time period Expenditures for maintenance activities increased by 5% on average annually from FY93 – FY05, and gas tax revenue
- Maintenance costs anticipated to continue to grow faster than gas tax revenue over next six years
- Maintenance costs expected to increase by 4% annually, and gas tax revenue forecasted to increase by 2.6%
- 2.6% forecast in gas tax revenue growth may overstate actual
- Based on \$25 per barrel oil cost
- Collections for FY05 were below forecast

VDOT's Past Approach to Maintenance

- Maintenance funds were allocated to the districts based primarily on previous year's distribution
- Supplemental allocations to districts based on input from district maintenance engineers determination of State maintenance engineer with
- Little consideration given to asset inventories, conditions, or district network growth

District as of 2004 (millions) Maintenance Needs By

Total	Statewide/other programs	Northern Virginia	Staunton	Culpepper	Fredericksburg	Hampton Roads	Richmond	Lynchburg	Salem	Bristol	District
\$2,933.6	139.1	296.0	280.4	175.9	203.4	408.1	531.0	199.5	348.5	\$351.7	Needs
100.0	4.7	10.1	9.6	6.0	6.9	13.9	18.1	6.8	11.9	12.0	% of Needs

=

Management Approach **VDOT Shifting to Asset**

- In mid-1990s VDOT began to examine the management system development of automated maintenance
- In 1998, VDOT contracted for development of (ICAS) Inventory Condition and Assessment System
- First phase of ICAS project was completed late and over budget due to data collection problems, and VDOT cancelled the contract in 2002

Asset Management Program Developed In-House

- A 2002 JLARC report recommended that VDOT implementation of asset management approach place a higher priority on development and
- General Assembly passed legislation in 2002 management into its maintenance and operations requiring VDOT to incorporate principles of asset practices
- VDOT has been working to develop asset management system using its own staff

Asset Management Approach

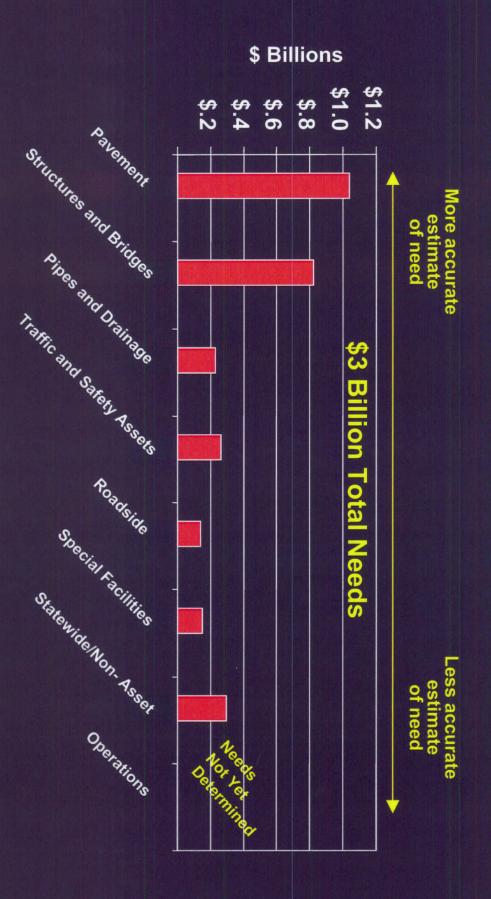
- More strategic approach to cost-effectively manage transportation assets over their total life cycle
- Objective determination of maintenance needs and engineering principles and business practices costs in accordance with generally accepted
- Investment in strategies such as preventive maintenance that improve the performance and extend the life of VDOT's assets
- Allocate maintenance funds based on objectively identified needs

Components of Asset Management

- Development of comprehensive and accurate inventory and condition data
- Identification of needed maintenance treatments and condition data as inputs and their costs using models that rely on inventory
- Allocation of funds to meet maintenance needs identified through modeling

15

Maintenance Needs by Category (November 2004)



VDOT Plans to Follow Needs-Based Allocation Approach

- Plan is to equitably distribute maintenance funds to districts based on needs identified through models
- Strategy is to incrementally adjust district budgets to address differences in need across them
- FY 2006 was the first year that asset management was factored into the budget process

17

FY 05 and FY 06 Distribution of Funds (millions)

18

Total	Statewide/Other Programs	Northern Virginia	Staunton	Culpeper	Fredericksburg	Hampton Roads	Richmond	Lynchburg	Salem	Bristol	District
993.8	123.1	148.5	103.6	68.0	63.0	122.5	105.9	70.6	101.2	\$87.4	FY 05
1,080	140.7	156.4	104.1	71.5	64.4	127.5	128.7	74.9	108	\$103.9	FY 06
100.0	4.7	10.1	9.6	6.0	6.9	13.9	18.1	6.8	11.9	12.0	% of Needs

Future Asset Management Plans

- Complete annual maintenance needs assessments and increasingly allocate funds based on need
- Develop a six-year maintenance and operations <u>investment over time</u> predictability and equity of funding, and stability of budget over time to provide greater transparency,
- Develop ability to accurately project long-term costs of operations

19

Future Challenges

- Performance targets that establish acceptable levels of asset deficiencies not yet developed
- Level of maintenance needs varies widely across **VDOT** districts
- Two billion dollar backlog in maintenance needs
- Maintenance costs projected to grow at greater rate than gas tax revenue

20

Local Maintenance Program

- Maintenance payments to localities will be \$285 million in FY 2006
- Urban maintenance allocation is \$246 million
- Cities and Towns
- Payments based on functional classification
- Since 2002, allocations have increased by 4% annually
- County maintenance allocation is \$39 million
- Arlington and Henrico Counties

Performance and Accountability Local Government Maintenance

- Historically, only requirement for cities and towns received and expended receiving payments was to report total amount
- Henrico and Arlington were not required to report
- Code of Virginia was amended in 2004 to require expenditures and their performance localities to annually report on categorical

22

Stakeholders Workgroup

- VML

Arlington

- Henrico
- Richmond
- Norfolk
- Virginia Beach
- Bristol

- Danville
- Blacksburg
- Alexandria
- Manassas
- VDOT
- UVA Weldon Cooper Center

Status of Stakeholder Workgroup

- Group has met four times since April 2004
- Approved local maintenance payment reporting requirements
- Working toward development of local performance targets and outcomes as required by the Code of Virginia

24

Summary

- Cost of maintenance has grown at faster rate than exceed construction expenditures revenues, and maintenance expenditures now
- VDOT has adopted asset management approach highway assets which should improve management of State's
- Future challenges remain: developing eliminating \$2 billion maintenance backlog in maintenance needs across districts, and performance targets, eliminating the wide variation

history pdf

CHAPTER 355

An Act to amend the Code of Virginia by adding a section numbered <u>33.1-13.02</u>, relating to a biennial report by the Department of Transportation on maintaining and operating existing transportation infrastructure.

[S 1128] Approved March 13, 2007

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 33.1-13.02 as follows:

§ 33.1-13.02. Biennial report on maintaining and operating existing transportation infrastructure.

No later than September 15 of each odd-numbered year, the Virginia Department of Transportation shall submit to the Governor, the Joint Legislative Audit and Review Commission, and the Commonwealth Transportation Board a report on the condition of and needs for maintaining and operating the existing transportation infrastructure in the Commonwealth for all asset management and maintenance, based on an asset management methodology. Such methodology shall, in accordance with generally accepted engineering principles and business practices, identify and prioritize maintenance and operations needs, including those for pavement, technology, bridges and other structures, pipes and draining, and congestion management and reduction. Reports shall include (i) the performance standards to be used to determine those needs, (ii) an estimate, for the upcoming two fiscal years, of the budget required to meet them, (iii) employment level goals for the next two years, and (iv) the percentage of asset management under private contract.

Legislative Information System



BIENNIAL REPORT ON

THE CONDITION AND PERFORMANCE OF SURFACE INFRASTRUCTURE IN THE COMMONWEALTH OF VIRGINIA

Chapter 335 and Chapter 355 of the 2007 Acts of the Virginia General Assembly

Virginia Department of Transportation 1401 East Broad Street Richmond, Virginia 23219 September 15, 2007



DEPARTMENT OF TRANSPORTATION

1401 EAST BROAD STREET RICHMOND, VIRGINIA 23219-2000

David S. Ekern, P.E.

September 15, 2007

The Honorable Timothy M. Kaine
Members of the Commonwealth Transportation Board
Joint Legislative Audit and Review Commission

Dear Ladies and Gentlemen:

Chapters 335, 355 and 847 of the 2007 Acts of Assembly established a framework under which the Virginia Department of Transportation (VDOT) is to report on the condition and needs for maintaining and operating the existing transportation infrastructure in the Commonwealth and various aspects of Agency Business Practices.

The enclosed report includes information which shows on a statewide basis:

- The condition of Virginia Interstate and Primary pavements has deteriorated in conditions slightly from 2006 to 2007 caused mainly by increased costs of materials purchasing less pavement repair. The ride quality continues to exceed established performance goals.
- The bridge inventory remains constant with approximately 8.4 % classified as Structurally Deficient which is consistent with trends for the last five years.
- Deaths and injury related crashes continue at levels exceeding 900 deaths per year and 72,000 injuries which are a serious concern for the Commonwealth.
- That VDOT continues to strengthen its use of the private sector in its business and service delivery with overall spending at 81% through the private sector and 69% of all maintenance spending through the private sector. Through F.Y. 2009 the focus will be on completing outsourcing of routine maintenance of the Interstate System through the Commonwealth.
- That VDOT continues to reshape its workforce having reduced from about 10,200 staff in 2002 to approximately 8,675 in 2007. During the 2009/10 biennium no significant reductions are anticipated. In addition, the Department is in the process of completing consolidation of its maintenance facilities from 348 to 244 sites statewide.

The report presents a snapshot of information on the condition and needs for preserving the existing transportation infrastructure and with the passage of HB3202 in 2007 it is anticipated that the needs in new infrastructure will begin to be addressed.

Sincerely,

David S. Ekern, P.E.

Davey 5. 8/2

Attachment

cc: The Honorable Pierce R. Homer

Preface

Chapter 335 and Chapter 355 of the 2007 Acts of Assembly require the Virginia Department of Transportation (VDOT) to report by September 15 of each odd-numbered year on the condition of and needs for maintaining and operating the existing transportation infrastructure based on an asset management methodology. The following is the full text of the two identical bills:

No later than September 15 of each odd-numbered year, the Virginia Department of Transportation shall submit to the Governor, the Joint Legislative Audit and Review Commission, and the Commonwealth Transportation Board a report on the condition of and needs for maintaining and operating the existing transportation infrastructure in the Commonwealth for all asset management and maintenance, based on an asset management methodology. Such methodology shall, in accordance with generally accepted engineering principles and business practices, identify and prioritize maintenance and operations needs, including those for pavement, technology, bridges and other structures, pipes and draining, and congestion management and reduction. Reports shall include (i) the performance standards to be used to determine those needs, (ii) an estimate, for the upcoming two fiscal years, of the budget required to meet them, (iii) employment level goals for the next two years, and (iv) the percentage of asset management under private contract.

Chapter 847 (Item 444 B.) of the 2007 Acts of Assembly requires VDOT:

By November 30 of each year, the Department shall submit to the Governor, General Assembly, and the Commonwealth Transportation Board a report on the condition of existing transportation infrastructure and proposed measures to improve the operations of the transportation system and the service areas listed in paragraph A. Such report shall include: 1) An assessment of the department's efforts to develop systematic mechanisms to evaluate its efforts as outlined in paragraph A.4. of this Item;

2) A report on all actions, accomplishments, achievements, and initiatives of the Virginia Department of Transportation, in the preceding fiscal year that involved outsourcing, privatization, and downsizing, as required pursuant to Chapter 420, Acts of Assembly of 2006; 3) An enumeration of the status of major bridge maintenance and replacement projects and the availability of federal highway bridge rehabilitation and replacement apportionments; and 4) In conjunction with the Department of Rail and Public Transportation, a report on the number of rail crossings in the metropolitan areas of Hampton Roads, Richmond and Northern Virginia. The report shall take into consideration the impediments to safety, mobility and economic development caused by the rail crossings as measured by the number of trains and frequency of train traffic; the vehicular traffic volumes at the crossings; and the lack of nearby rail and road alternatives. The report shall include an estimate of the costs to remove, relocate or remediate those rail crossings that have the greatest impacts on communities, including environmental."

To get a full understanding of the long term condition and performance of the physical infrastructure managed, maintained and operated by the Virginia Department of Transportation and the business directions being pursued by the department, these two reports must be reviewed together.

This report addresses each of the four reporting requirements of Chapter 335 and Chapter 355 of the 2007 Acts of Assembly:

- Performance goals used to determine the needs;
- An estimate of the budget for the upcoming biennium to meet performance goals;
- Estimated employment level for the biennium; and
- Percent of asset management under private contract.

Other reports and activities will also influence the performance goals that will be used in deciding the allocation of resources. By October 1, 2007, the Governor's Transportation Accountability Commission will also make its final recommendations regarding performance measures for the transportation system and agencies.

The Council on Virginia's Future has also established and monitors performance of Virginia's transportation programs. Information is available at Virginia Performs (www.vaperforms.virginia.gov) and includes indicators for traffic congestion, infrastructure condition, and land use.

BIENNIAL REPORT ON THE CONDITION AND PERFORMANCE OF SURFACE INFRASTRUCTURE IN THE COMMONWEALTH OF VIRGINIA

Executive Summary

Beginning in the late 1990's, the Virginia Department of Transportation (VDOT) began developing an asset management system that facilitates the decision-making process for determining maintenance and operations needs. Beginning with FY 2006, the system's outputs were used to establish maintenance and operations budget priorities around the Commonwealth. In addition, as the Commonwealth Transportation Board's (CTB) Six-Year Improvement Program is developed, maintenance replacement priorities are considered for funding.

In 2002, the *Code of Virginia* was amended to include a definition of the term "maintenance" and "asset management" as they apply to highways, bridges, and ferries. Since that time, the Governor and General Assembly have: modified the programmatic budget and performance management structure for maintenance and asset management; outlined additional outsourcing requirements; supported staffing and location adjustments to maintenance activities; established requirements for local reporting on maintenance spending and asset condition; and lastly, increased the funding to maintenance activities.

This report is the next step in reporting on the condition of the highway infrastructure and the budgetary need for addressing that condition.

History of Performance Standards, Condition of Existing Infrastructure, and Need

VDOT continues to refine its performance-based system in which condition and performance of the highway infrastructure are collected and reported. As background, first, the various components of the highway infrastructure, commonly referred to as assets, were defined. Then, quantitative measures were developed for key assets. During the 2004-2006 biennium, the key performance measures for the maintenance of the highway network were 1) less than 18 percent of deficient pavement on the Interstate and Primary systems and 2) less than 40 percent of bridges rated as candidate for repair or replacement on the Primary and Interstate systems.

At the same time, VDOT reported for the first time its total maintenance and operations need. Total maintenance and operations need is an empirical figure that does not take into consideration repair work underway, planned work, or funding availability or source. Rather, total need is meant to measure, based on actual information on a specific date, what is the amount of estimated funding required to bring all of the assets up to an acceptable level of condition and provide acceptable level of operational services. Maintenance needs are prioritized through the setting of targets.

In the traditional needs-based approach, past reports indicated the estimated total needs to bring assets up to an acceptable level of condition were \$2.9 billion, \$3.3 billion and \$3.8 billion for FY 2005, FY 2006 and FY 2007, respectively.

As a result, in FY 2006, VDOT requested, and the Governor and General Assembly approved, a 10 percent increase to, or \$97 million in, the maintenance budget to begin addressing the need. This increase has become part of the maintenance base budget. In FY 2007 and FY 2008, the maintenance budget was increased again by approximately \$50 million and \$19 million, respectively. Figure ES-1 presents VDOT's annual maintenance allocation since FY 2002.

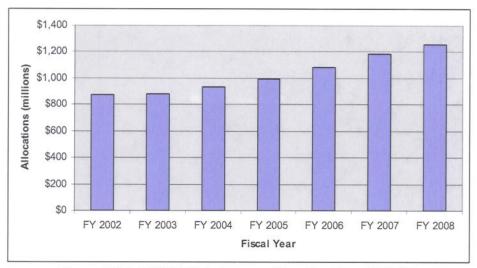


Figure ES-1. VDOT Maintenance Allocation Since FY 2002

In addition, since 2002, both the Joint Legislative Audit and Review Commission and the Auditor of Public Accounts have reviewed the methodology and results of VDOT's early asset management work. Both found that the approach was appropriate and recommended that VDOT continue to implement the asset management methodology. The Auditor of Public Accounts' follow-up review in 2004 found that the Asset Management System enabled VDOT to "... identify maintenance needs based on asset inventory, and compare alternative maintenance allocation strategies and the effect of performance targets for the initial set of assets."

In addition, other reports and activities have been undertaken to examine asset condition and its performance. The Council on Virginia's Future has also established and monitors performance of Virginia's transportation programs. Information is available at Virginia Performs (www.vaperforms.virginia.gov) and includes indicators for traffic congestion, infrastructure condition, and land use. As of September 2007, traffic congestion is worsening and the infrastructure condition is about the same according to the measures used.

By October 1, 2007, the Governor's Transportation Accountability Commission will make its final recommendations regarding performance measures for the transportation system and agencies.

Tables ES-1 and ES-2 summarize the performance measures and targets that are used at a more detailed level for assets and system performance, respectively. For the items in Tables ES-1 and ES-2, the measures and targets were established in 2007. The bridges/culverts performance measure is now structures rated as structurally deficient instead of in need or repair or

rehabilitation. These measures and targets are based on work that has been performed nationally in this area. Data was collected from the Federal Highway Administration (FHWA), Texas Transportation Institute, American Society of Civil Engineers, National Society of Professional Engineers, and the Reason Foundation.

Table ES-1. Summary of Asset Condition

Asset	Measure	Target	Current Performance
Pavement	% of network in deficient	≤ 18% - I	19.1% - I
	condition	≤ 18% - P	21.2% - P
		No target set - S	24.2% - S
Pavement	% of network with fair or better	≥ 85% - I	93.6% - I
	ride quality	≥ 85% - P	88.0% - P
Bridges/Culverts	% of bridges rated as	≤ 3% - I	2.8% - I
	structurally deficient	≤6% - P	5.9% - P
		≤11% - S	10.8% - S
Cross Pipe	% of inventory in need of repair	≤ 10% - I	10.2% - I
	or replacement	≤ 20% - P	21.4% - P
		≤ 20% - S	18.2% - S
Paved Ditches	% of inventory in need of repair	≤ 25% - I	24.1% - I
	or replacement	≤ 25% - P	26.1% - P
	Section (Control of Control of Co	≤ 10% - S	8.8% - S
Unpaved Ditches	% of inventory in need of repair	≤ 17% - I	17.4% - I
	or replacement	≤ 8% - P	8.0% - P
		≤ 10% - S	10.2% - S
Unpaved Shoulders	% of inventory in need of repair	NA - I	NA - I
	or replacement	≤ 18% - P	18.0% - P
		≤ 16% - S	15.0% - S
Guardrail	% of inventory in need of repair	≤ 2% - I	1.5% - I
	or replacement	≤ 2% - P	1.6% - P
		≤ 3% - S	2.5% - S
Guardrail Terminals	% of inventory in need of repair	≤ 4% - I	3.5% - I
	or replacement	≤ 4% - P	3.4% - P
		≤ 4% - S	3.6% - S
Pavement Markings	% of inventory in need of repair	≤ 30% - I	30.6% - I
	or replacement	≤ 65% - P	66.5% - P
		≤ 70% - S	71.7% - S
Signs	% of inventory in need of repair	≤ 5% - I	7.9% - I
7/3	or replacement	≤ 5% - P	5.0% - P
		≤ 10% - S	10.2% - S

I = Interstate; P = Primary; S = Secondary

Table ES-2. Summary of System Performance

Dimension	Measure	Target	Current Performance	
Safety	Number of traffic deaths annually	846 by 2010	961 (in Calendar Year 2006)	
Safety	Number of traffic injuries annually	72,023 by 2010	73,348 (in Calendar Year 2006)	
Congestion	% of travel (VMT) that is congestion free	≥ 86% - I 80% of the time	84% - I (as of September 6, 2007)	
Delay	% of incidents cleared within 60 and 90 minutes	65% & 90% - I	65% & 79% - I (as of September 11, 2007	

I = Interstate; P = Primary; S = Secondary

Estimated FY 2009-2010 Performance Based Investment

For the first time, VDOT has estimated the spending required to achieve performance targets for most asset groups. The need is determined based on the size and age of inventories, current condition, deterioration rates, and the quantity and cost of each repair. The type of repair assumed (replace, extend, etc.) is determined using a life-cycle methodology.

Based on the performance measures in Table ES-1 and Table ES-2, the maintenance need for the 2009-2010 biennium is \$3.0 billion (Table ES-3). This \$3.0 billion only reflects assets maintained by VDOT and not those of cities, towns, or the counties of Henrico and Arlington. Of that \$3.0 billion in maintenance need, \$1.9 billion is for items that can be considered routine maintenance and are paid solely from the maintenance program budget. For operations, which includes provision of existing operational services, maintenance support programs (equipment and materials management), to be maintained at their existing level will require \$431 in the biennium.

Table ES-3. Performance Based Estimates by Activity for FY 2009-2010 Biennium (millions)

Program Descriptions	Maintenance	Maintenance Replacement	Operations	Total
Interstate System	1200000		200	
Maintenance	\$247.1	\$174.2	\$4.7	\$426.0
Primary System Maintenance	528.1	267.8	11.5	807.4
Secondary System Maintenance	920.8	238.9	8.7	1,168.4
Transportation Operations Services	0.1	0.0	350.2	350.3
Management and Direction	173.0	0.0	55.8	228.7
Total	\$1,869.0	\$680.8	\$430.9	\$2,980.8

For the asset categories, pavements represent \$1.16 billion or 39 percent of the need. Bridges represent \$284 million or approximately ten percent of the need for the FY 2009-2010 biennium. Cross pipes, paved and unpaved ditches, unpaved shoulders, guardrail, guardrail terminals, pavement marking, and signs represent another \$340 million or approximately 11 percent of the FY 2009-2010 biennium needs. Maintenance and operations of signals, highway lighting, traffic operations centers, tunnels, ferries, incident management, and traffic engineering represent \$323 million, or 11 percent of the biennium needs. Snow and ice removal represent \$133 million or four percent, and equipment and materials inventory management represent \$120 million, or four percent, of the biennium needs. The remaining needs are for other assets and programs.

Many maintenance replacement activities and operational improvements are eligible for, and are paid for, as part of the construction program. For example, nine of the 22 Interstate projects in the Bristol District's construction program are the refurbishment, correction, or replacement of existing highway infrastructure. Another example is the \$77 million allocated by the CTB for operational improvements statewide. This funding will be focused on addressing sign replacement throughout the Interstate system.

These needs could be addressed through the Six-Year Maintenance and Operations Program, the Six-Year Improvement Program or through private or regional/local projects. The source of funding to address the need is based on decisions made by the Governor, General Assembly, and the CTB. The planned maintenance and operations budget for the FY 2009-2010 biennium based on the FY 2008-2013 Six Year Improvement Program is \$2.7 billion. Although the needs shown are greater than the planned maintenance and operations biennial budget, additional allocation is not requested for that program since it is expected that needs not addressed through the Six-Year Maintenance and Operations Program will be addressed by the Six-Year Improvement Program or through a Public-Private Transportation Act (PPTA) project.

Asset Management Outsourcing

In FY 2007, \$664 million of the \$971 million, or 69 percent, spent by VDOT in the maintenance program was paid to the private sector. Of the payments to the private sector, \$464 million (48 percent of the \$971 million) was directly delivered through private contracts. Another \$200 million (21 percent of the \$971 million) was paid to vendors for supplies, materials, fuel, and non-contracted services that support maintenance and operations.

Employment Levels

Since 1986 (see Figure ES-2), the agency's commitment to outsourcing, devolution, and internal efficiency initiatives has resulted in an overall staff level reduction of 1,671 employees (-16.3%) during a time when the transportation infrastructure has expanded by approximately 7.6 percent (increase of 8,700+ lane miles).

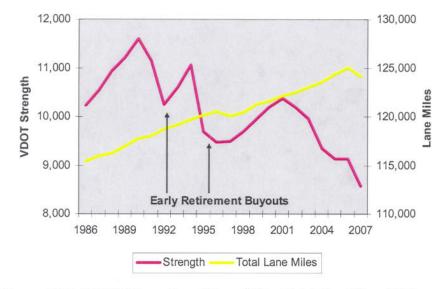


Figure ES-2. VDOT Strength and Lane Miles Maintained Since 1986

In the past five years, direct service-delivery responsibilities have continued to shift from the state workforce to private contractors across all areas of the agency. From 2002 to 2007, VDOT reduced the number of classified employees significantly. VDOT employment levels are expected to remain relatively constant for the FY 2009-2010 biennium with no major reductions.

BIENNIAL REPORT ON THE CONDITION AND PERFORMANCE OF SURFACE INFRASTRUCTURE IN THE COMMONWEALTH OF VIRGINIA

Virginia's Transportation Infrastructure

Virginia has the third largest state-maintained highway system in the country (behind North Carolina and Texas), with approximately 57,000 centerline miles of roads and 19,293 structures (bridges and large culverts). Table 1 provides summary information on the inventory of various categories of assets in the State Highway System.

Table 1. Current Inventory in the State Highway System

Inventory Item	Interstate	Primary	Secondary	Frontage ¹	Total VDOT Maintained
Lane Miles	5,383	21,642	97,128	658	124,811
Bridges/Culverts	3,010	5,012	11,271		19,293
Tunnels	5	1	,		6
Toll Facilities		3			3
Tolled Lane Miles		166			166
Safety Rest Areas	41				41
Welcome Centers	11				11
Ferries (vessels)		4	3		7
Pipes ²	8,000	58,000	269,000		335,000
Ditches ² (ft.)	16,067,000	65,126,000	343,278,000		424,471,000
Unpaved Shoulders ² (ft.)	NA	64,085,000	286,800,000		350,885,000
Pavement Marking ² (ft.)	57,029,000	168,620,000	120,142,000		345,791,000
Guardrail ² (ft.)	9,353,000	11,739,000	6,655,000		27,747,000
Signs ²	40,000	161,000	234,000		435,000
Signals	0	1,802	1,228		3,030
Cameras	363	9			372
Dynamic Message Sign	532	85			617
Traffic Sensors	1,416				1,416
Count Stations	73	126	17		216
Roadway Weather Information System	62				62
Fog Detectors	2	0	0		2
HOV gates	30	0	0		30
Highway Advisory Radio	32	1	0		33

The Random Condition Assessment did not include frontage roads
Estimated inventory based on statistical sampling (see Appendix)

Performance Standards and Condition of the Existing Infrastructure

The Virginia Department of Transportation (VDOT) continues to refine its performance based system on which maintenance and operations spending for the existing infrastructure is based. Table 2 presents performance measures and targets for major assets.

Chapter 847 of the 2007 Acts of Assembly requires VDOT to report on the condition of the existing infrastructure each November 30th. That report (also called the *State of the Assets Report*) should be reviewed together with this report because it explains, in detail, the condition and assessment methodology for various asset categories.

Collectively, the ten assets included in Table 2 have accounted for the majority of historical asset maintenance expenditures on the Interstate, Primary and Secondary systems. More comprehensive inventories are now being developed for signs, guardrail, pavement marking, shoulders, curb and gutter, signals, signal mast arms, overhead sign structures, cameras, dynamic message signs, traffic sensors, and a number of other assets that will provide the basis for improved needs assessments, planning and management of those assets.

Table 2. Summary of Asset Condition

Asset	Measure	Target	Current Performance
Pavement	% of network in deficient	≤ 18% - I	19.1% - I
	condition	≤18% - P	21.2% - P
		No target set - S	24.2% - S
Pavement	% of network with fair or better	≥ 85% - I	93.6% - I
	ride quality	≥ 85% - P	88.0% - P
Bridges/Culverts	% of bridges rated as	≤3% - I	2.8% - I
(5)	structurally deficient	≤6% - P	5.9% - P
		≤11% - S	10.8% - S
Cross Pipe	% of inventory in need of repair	≤ 10% - I	10.2% - I
	or replacement	≤ 20% - P	21.4% - P
	-	≤ 20% - S	18.2% - S
Paved Ditches	% of inventory in need of repair	≤ 25% - I	24.1% - I
	or replacement	≤ 25% - P	26.1% - P
		≤ 10% - S	8.8% - S
Unpaved Ditches	% of inventory in need of repair	≤ 17% - I	17.4% - I
**************************************	or replacement	≤8% - P	8.0% - P
		≤ 10% - S	10.2% - S
Unpaved Shoulders	% of inventory in need of repair	NA - I	NA - I
	or replacement	≤ 18% - P	18.0% - P
	2 3	≤ 16% - S	15.0% - S
Guardrail	% of inventory in need of repair	≤2% - I	1.5% - I
	or replacement	≤ 2% - P	1.6% - P
		≤ 3% - S	2.5% - S
Guardrail Terminals	% of inventory in need of repair	≤ 4% - I	3.5% - I
	or replacement	≤4% - P	3.4% - P
		≤4% - S	3.6% - S
Pavement Markings	% of inventory in need of repair	≤30% - I	30.6% - I
	or replacement	≤ 65% - P	66.5% - P
	A TOWN STONE OF THE STONE OF TH	≤ 70% - S	71.7% - S
Signs	% of inventory in need of repair	≤ 5% - I	7.9% - I
	or replacement	≤ 5% - P	5.0% - P
		≤ 10% - S	10.2% - S

I = Interstate; P = Primary; S = Secondary

Table 3 summarizes the measures, targets, and performance of the system. The measures and targets in Tables 2 and 3 are based on work that has been performed nationally in this area. Data was collected from the Federal Highway Administration (FHWA), Texas Transportation Institute, American Society of Civil Engineers, National Society of Professional Engineers, and the Reason Foundation.

Table 3. S	Summary	of !	System	Performance
------------	---------	------	--------	-------------

Dimension	Measure	Target	Current Performance
Safety	Number of traffic deaths annually	846 by 2010	961 (in Calendar Year 2006)
Safety	Number of traffic injuries annually	72,023 by 2010	73,348 (in Calendar Year 2006)
Congestion	% of travel (VMT) that is congestion free	\geq 86% - I 80% of the time	84% - I (as of September 6, 2007)
Delay	% of incidents cleared within 60 and 90 minutes	65% & 90% - I	65% & 79% - I (as of September 11, 2007)

I = Interstate; P = Primary; S = Secondary

Pavements

Pavement condition data are collected annually for 100% of Interstate and Primary pavements. Secondary pavements are surveyed on a statistical sample basis with approximately 20 percent of the network inspected each year. Pavement condition data are collected using vehicles outfitted with state of the art equipment to measure roughness, rutting, cracking, and other physical distresses. The data are summarized into a condition index that ranges from 0 to 100, where 100 represents the best condition. Pavements with a condition index below 60 are considered to be in deficient condition, which means that they require resurfacing, restorative maintenance, or rehabilitation. Figure 1 shows Interstate and Primary system pavement condition for 2006 and 2007. While no data were collected on Secondary pavements in 2006, 24.2 percent of the 20 percent sampled in 2007 were found to be deficient.

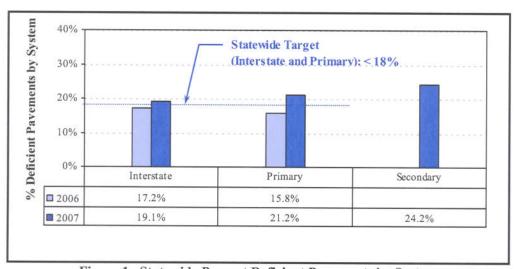


Figure 1. Statewide Percent Deficient Pavements by System

The 2007 pavement condition survey found that 19.1 percent of Interstate and 21.2 percent of Primary pavements are deficient statewide (in poor or very poor condition defined as having a Critical Condition Index of < 60). This is above the established performance target of no more than 18 percent of Interstate and Primary system pavements in deficient condition statewide. The 2007 pavement condition survey was conducted in the spring of 2007 so that the pavement rehabilitation work completed during the summer of 2007 has not been captured in this survey. Table 4 shows percent deficient pavements in each district by system.

Table 4. Pavement Condition by District and System

	Inter	state	Primary		Secondary (Sample)	
District	Deficient Lane Miles	Percent Deficient	Deficient Lane Miles	Percent Deficient	Deficient Lane Miles	Percent Deficien
Bristol	147.5	27.4%	372.7	12.8%	596.0	30.9%
Salem	111.4	22.7%	461.2	17.6%	605.4	21.9%
Lynchburg	NA	NA	294.1	10.9%	489.2	18.5%
Richmond	235.4	18.3%	747.2	23.3%	440.8	15.5%
Hampton Roads	160.1	20.3%	364.4	21.3%	377.3	26.7%
Fredericksburg	80.6	28.8%	497.2	23.0%	578.8	29.6%
Culpeper	37.7	13.5%	450.1	24.9%	374.2	24.3%
Staunton	46.7	4.9%	629.5	25.4%	245.8	12.8%
Northern Virginia	177.1	29.2%	668.0	42.2%	885.2	44.4%
Statewide	996.5	19.1%	4,484.4	21.2%	4,592.7	24.2%

Another measure of pavement performance is ride quality. Pavement ride quality is measured by International Roughness Index. A pavement section with an International Roughness Index value less than 140 is termed to have a fair or better ride quality. The performance target set for pavement ride quality is no less than 85 percent of the Interstate and Primary pavements will have fair or better ride quality. The target is based on benchmarking with other states. Statewide, 93.6 percent of the Interstate and 88.0 percent of the Primary pavements were rated to have a fair or better ride quality based on the last condition evaluation performed in 2007. Table 5 shows the percent of each district's network with fair or better ride quality by system.

Table 5. Percent of District Network with Fair or Better Ride Quality

District	Interstate	Primary
Bristol	99.3%	81.9%
Salem	98.6%	90.7%
Lynchburg	NA	95.5%
Richmond	88.9%	85.8%
Hampton Roads	81.5%	87.2%
Fredericksburg	97.4%	90.4%
Culpeper	98.6%	96.9%
Staunton	99.5%	87.9%
Northern Virginia	92.3%	69.8%
Statewide	93.6%	88.0%

Bridges and Large Culverts

There are 20,823 bridges and large culverts in Virginia, 13,118 of which are included in the National Bridge Inventory, 19,293 are maintained by VDOT. Currently, 56 percent of all structures (bridges and large culverts) in Virginia are 40 years old or older as shown in Figure 2.

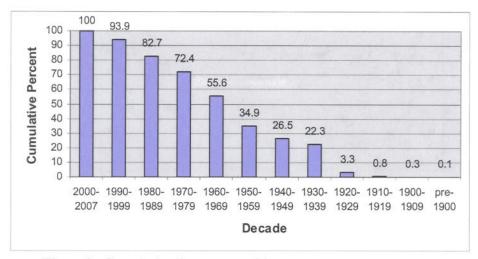


Figure 2. Cumulative Percentage of Structures in Virginia by Age

In accordance with the Code of Federal Regulations, VDOT inspects bridges and culverts that are part of the National Bridge Inventory, defined as structures on public roadways and exceeding 20 feet in length measured along the centerline of the roadway. National Bridge Inventory structures receive a detailed inspection at regular intervals not exceeding 24 months. In addition to the federal inventory and inspection requirements, VDOT also inventories and inspects bridges measuring 20 feet or less in length and large culverts having an opening of 36 square feet or greater. Inspectors use condition ratings to describe the existing, in-place structure as compared to the as-built condition. These condition ratings are based on FHWA's criteria.

VDOT uses FHWA's criteria for identifying deficient or functionally obsolete structures.

- Structurally Deficient—a Structurally Deficient Bridge is one that 1) has been restricted to light vehicles only, or 2) is closed to traffic, or 3) requires rehabilitation.
- Functionally Obsolete—a Functionally Obsolete bridge is one which the deck geometry, load carrying capacity, clearances, or approach roadway alignment no longer meets today's standards.
- Sufficiency Rating—this is a formula that was developed by FHWA to rank bridges and allocate funds. A sufficiency rating of a bridge varies from 0 (poor) to 100 (very good).
 The formula considers the structural adequacy; functional obsolescence and level of service; and essentiality for public use.

Table 6 presents the inventory of bridges and large culverts in Virginia and the number that are structurally deficient, functionally obsolete, or load posted.

Table 6. Virginia's Structure Inventory and Rating by System¹

	Interstate ²	Primary	Secondary	Urban	Other	Total
No. of						
Structures	3,006	5,099	11,448	1,194	76	20,823
Structurally						
Deficient	84	300	1,256	98	1	1,739
Functionally						
Obsolete	363	679	1,813	243	5	3,103
Load Posted	5	72	1,422	82	3	1,584

¹ Includes 1,530 structures (primarily in Urban and Other) that are not maintained by VDOT

Drainage, Guardrail and Markings

The performance measure for pipes, paved and unpaved ditches, unpaved shoulders, guardrail, guardrail terminals and pavement markings is defined as the percent of inventory needing repair or replacement. Targets for each asset are shown in Table 2. Inventories and condition of these assets are assessed through a Random Condition Assessment process (see Appendix for methodology).

Guardrail and Guardrail Terminals

There are an estimated 28 million linear feet of guardrail on VDOT maintained roads. While most guardrail is in good physical condition, as shown in Table 2, a large proportion (58 percent) of guardrail is no longer compliant with current National Cooperative Highway Research Program 350 standards. Guardrail may remain in satisfactory condition for many years until it is hit or damaged by storms, erosion or other factors. During FY 2007, approximately 360,000 feet of guardrail were replaced or upgraded.

Pavement Markings

An estimated 346 million linear feet of pavement marking exists on VDOT maintained roads. VDOT uses several types of pavement marking material including tape, thermo-plastic, epoxy, and latex paint. Each of the products has its own life cycle.

Tunnels

VDOT operates six tunnel facilities—four river tunnels and two mountain tunnels. Table 7 presents location and traffic volume data for each tunnel facility.

² This includes bridges crossing over the Interstate

Table 7. Average Daily Traffic Volume at Each Tunnel

Tunnel	Location	Average Daily Traffic Volume (# of vehicles) ¹
Hampton Roads Bridge Tunnel	I-64	91,000
Midtown Elizabeth River Tunnel	Rt. 58	35,000
Downtown Elizabeth River Tunnel	I-264	96,000
Monitor-Merrimac Memorial Bridge Tunnel	I-664	57,000
Big Walker Mountain Tunnel	I-77	27,000
East River Mountain Tunnel	I-77	28,000

Traffic volumes rounded to the nearest 1,000 vehicles per day

Ferries

VDOT operates four ferry services, utilizing seven ferry boats. Table 8 provides information on the carrying capacity and the age of each ferry boat.

Table 8. Summary of VDOT Ferry Boats

Vessel	Year Built	Capacity	Ferry Service		
Virginia 1936		28 cars	Jamestown-Scotland Ferry		
Surry	1979	50 cars	Jamestown-Scotland Ferry		
Williamsburg	1983	50 cars	Jamestown-Scotland Ferry		
Pocahontas	1995	70 cars	Jamestown-Scotland Ferry		
Northumberland	1985	2 cars	Sunnybank Ferry		
Lancaster	1985	2 cars	2 cars Merry Point Ferry		
The Hatton 1986		2 cars	The Hatton Ferry is one of the las two poled ferries in the U.S.		

Safety Rest Areas

VDOT operates and maintains 41 safety rest areas and 11 welcome centers. Safety rest areas are facilities that provide traveler services and rest. These facilities include buildings, shelters, tables, plumbing/sanitation systems, HVAC systems, parking lots, ramps, curb and gutter, lighting, fencing, and vegetation.

System Performance

Safety, system operating performance, and incident management are core elements of a maintenance and operations program. The definition of maintenance in §33.1-23.02 of the *Code of Virginia* was amended to include "... operations that include but are not limited to traffic signal synchronization, incident management, other intelligent transportation system functions."

Safety

As shown in Figure 3, annual crashes on Virginia's peaked in 2003 and declined slightly since then, particularly when considering the rate per population. However, traffic safety remains a major health issue in the Commonwealth. Figure 4 shows that the number of deaths from crashes has remained relatively stable for the last decade. Yet, traffic crashes are the leading cause of death for those under 30 in Virginia and our rate per population is over 70 percent higher than the best state's rate (7.2) and above the worldwide average of 34 developed countries (11.7). While injuries resulting from traffic crashes have been declining (as shown in Figure 5), Virginia's injury rate per population remains above the national average.

The 2006-2010 Strategic Highway Safety Plan addresses highway safety as a health issue and sets a goal of 100 fewer deaths and 4,000 less people injured in crashes.

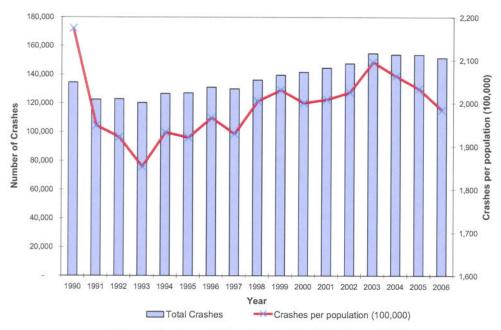


Figure 3. Annual Crashes in Virginia Since 1990

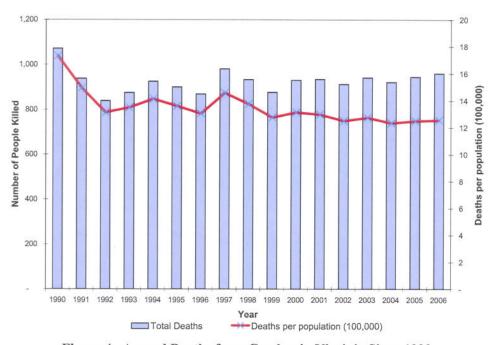


Figure 4. Annual Deaths from Crashes in Virginia Since 1990

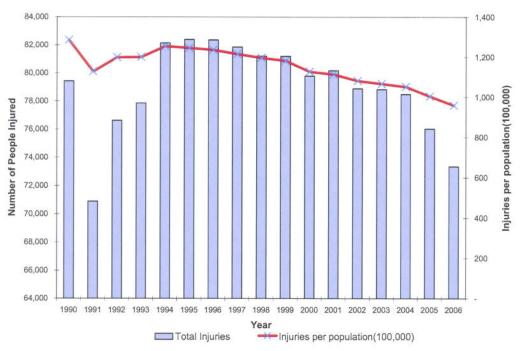


Figure 5. Annual Injuries from Crashes in Virginia Since 1990

System Operating Performance

In addition to evaluating the condition of the assets that comprise the roadway network, evaluating how well it performs in providing the most efficient use of the capacity of the network is also an important measure of maintenance since the *Code of Virginia* defines maintenance to include traffic operations.

Figure 6 shows that by and large the percentage of congestion free travel on the Interstate statewide has been congestion free, on average, 87 to 90 percent of the time. This measure reflects the large percentage of rural Interstate in Virginia that is operating at its posted speeds most of the time. Likewise, the yellow and red lines in Figure 6 indicate significant congestion continues to occur in some areas, primarily the urban areas of Virginia.

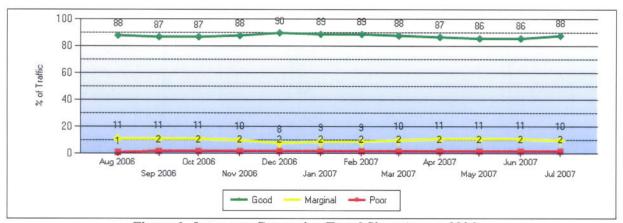


Figure 6. Interstate Congestion Trend Since August 2006

This trend is not unique to Virginia. Congestion reports in other urban areas across the country and national studies document similar trends. The marginal and poor performing sections of Interstate are in the urban corridors. The Texas Transportation Institute studies on congestion in major areas of the United States have documented that congestion continues to grow. Most recently, data suggest a greater growth in travel time over the last several years with substantially fewer additional trips being added over the same period.

Commuting distances are becoming longer, with the proportion of trips from one jurisdiction to another increasing. Also, more people in large urban areas are traveling in a one-way trip to work that is longer than 60 minutes. The length of congested periods is growing as well. For urban areas with a population of more than one million, the Institute data indicate that peak travel hours are now three hours long in each direction.

Incident Management

VDOT operates Safety Service Patrols in four areas: Hampton Roads, Fredericksburg, Salem and Northern Virginia. These patrols cover approximately 350 centerline miles of predominately Interstate and assist stranded motorists and provide traffic control during traffic incidents. This

free service, which began in 1972 in Northern Virginia, was initiated to reduce congestion caused by vehicle breakdowns. Safety Service Patrols responded to over 80,000 incidents or motorist assists between January and August of 2007. Figure 7 presents the statewide average incident duration by month since August 2006.

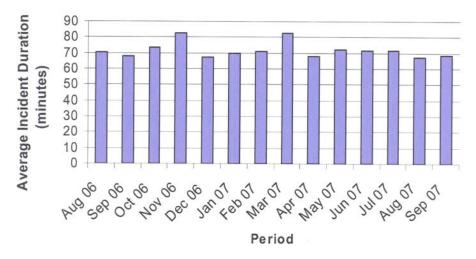


Figure 7. Statewide Average Incident Duration Since August 2006

Estimated FY2009-2010 Performance Based Investment

Over the past five years, the asset management methodology and the Asset Management System have enabled VDOT to move from allocating funds based on historical funding to a process that allocates funds based on actual quantified maintenance needs. The budgeting process using the asset management methodology has focused on preserving the infrastructure by identifying maintenance work needed to achieve stated performance targets for the physical condition of assets (see appendix for methodology). Over the last two years, the focus has shifted to include the operational performance of the system as well as its physical condition. Accordingly, this needs assessment identifies and distinguishes the following categories of need:

- Maintenance—ordinary, routine preventive and corrective maintenance of existing assets;
- Maintenance replacement—major rehabilitation, total replacement or reconstruction of existing assets; and
- Operations—continued provision of existing operational services, maintenance support programs, and management and direction.

Table 9 presents the maintenance potential needs identified for key assets on the existing transportation infrastructure.

Table 9. Estimated Performance Based Maintenance Biennium Investment for Major Assets

Asset Type	Biennium Needs (million)	
Pavements	\$1,163.0	
Bridges	284.2	
Cross Pipe	46.5	
Ditches	36.4	
Signs	25.1	
Pavement Markings	143.1	
Guardrail	41.9	
Unpaved Shoulders	47.0	
Total	\$1,787.2	

Other Estimated Performance Based Potential Biennium Spending Needs

Electronic Assets

Approximately \$63 million is needed for preventative and reactive maintenance and \$97 million for replacement of obsolete or non-functioning electronic assets over the biennium. In addition, \$6 million are needed to fund signal retiming projects at locations across the state. Approximately \$57 million is needed for operations (i.e. utilities and operators) over the biennium to operate electronic assets and the five Traffic Emergency and Operations Centers located across the state. An additional \$10 million is needed to provide engineering services and statewide management and direction to support the program.

Tunnels

VDOT spends approximately \$20 million per year to operate the six state tunnel facilities. In addition, approximately \$40 million in maintenance is needed over the biennium to address Fire-Life-Safety compliance to the two mountain tunnels on I-77 in southwestern Virginia and four river tunnel facilities in Hampton Roads to bring them up to the 2004 National Fire Protection Association (NFPA) 502 Standard for Road Tunnels, Bridges, and Other Limited Access Highways. This standard sets the minimum fire protection and fire-life-safety requirements for such facilities. Because NFPA 502 is now issued as a standard, compliance is no longer a recommendation, it is required. NFPA 502 sets nationally recognized requirements that provide a level of safety expected by the traveling public.

Ferries

VDOT spends approximately \$12.5 million per year to operate four ferry services and to maintain seven boats. The two oldest ferries at the Jamestown Scotland ferry operation are both eligible for replacement, at a cost of approximately \$20 million each and the two-car ferries at Merry Point and Sunnybank are also in need of replacement with four-car ferries at an estimated cost of \$750,000 each.

Safety Rest Areas

VDOT currently spends about \$20 million per year to operate and provide basic maintenance to the safety rest areas and welcome centers across the state. Approximately \$93 million worth of renovation, expansion, or rebuilding of deteriorating facilities is needed. In addition, expansion of parking to meet current Interstate demand, public sewer work, and approximately \$7.4 million in safety enhancements to 20 deceleration and 34 acceleration ramps at several safety rest areas has been identified.

Snow and Ice Removal

VDOT expects to spend approximately \$132 million on snow and ice removal and preparation over the biennium.

Table 10 presents the estimated maintenance and operations FY 2009-2010 biennium performance based investment on the existing transportation infrastructure.

Table 10. Estimated FY 2009-2010 Biennium Performance Based Investment (millions)

Program Descriptions	Maintenance	Maintenance Replacement	Operations	Total
Interstate System Maintenance	\$247.1	\$174.2	\$4.7	\$426.0
Primary System Maintenance	528.1	267.8	11.5	807.4
Secondary System Maintenance	920.8	238.9	8.7	1,168.4
Transportation Operations Services	0.1	0.0	350.2	350.3
Management and Direction	173.0	0.0	55.8	228.7
Total	\$1,869.0	\$680.8	\$430.9	\$2,980.8

These needs could be addressed through the Six-Year Maintenance and Operations Program, the Six-Year Improvement Program or through private or regional/local projects. The source of funding to address the need is based on decisions made by the Governor, General Assembly, and the Commonwealth Transportation Board (CTB).

It should be noted that while the potential investment shown in Table 10 is greater than the projected Maintenance and Operations Program planned FY 2009-2010 biennial allocation of \$2.7 billion, additional allocation is not requested for that program since it is expected that investment not addressed through the Six-Year Maintenance and Operations Program will be addressed by the Six-Year Improvement Program or through a Public-Private Partnership Act (PPTA) project.

Percent of VDOT Dollars Expended Externally

During fiscal year 2007, VDOT had total expenditures of \$2.9 billion. A breakdown of these expenditures is shown in Figure 8. This breakdown indicates that 81 percent of all VDOT expenditures either go to the private sector or to localities or other agencies.

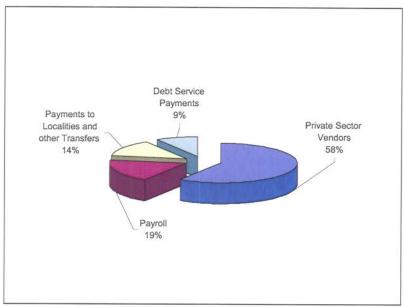


Figure 8. FY 2007 VDOT Total Spending

Asset Management Outsourcing

VDOT has entered into contracts with the private sector to deliver many maintenance and operations related projects and services. In FY 2007, \$664 million of the \$971 million, or 69 percent, spent by VDOT in the maintenance program was paid to the private sector. Of the payments to the private sector, \$464 million (48 percent of the \$971 million) was directly delivered through private contracts. This percentage is expected to increase in FY 2009-2010 as more maintenance and operations services are delivered through private contract. Another \$200 million (21 percent of the \$971 million) was paid to vendors for supplies, materials, fuel, and non-contracted services that support maintenance and operations.

By law, the department is to outsource all Interstate maintenance by July 1, 2009. In response, VDOT has developed Turnkey Asset Maintenance Services (TAMS) contracts where private vendors manage and perform routine, ordinary maintenance, incident management, management of inclement weather events, and replacement of assets that are damaged due to incidents and/or inclement weather. TAMS contracts do not include capital improvements to pavement and bridges. To date, 648 of 1,017 Interstate miles, or 58 percent, have already been outsourced to the private sector. The remaining portions of the Interstate will be under TAMS contracts by July 1, 2009.

Examples of other significant maintenance and operations outsourcing include:

 Pavement resurfacing—pavement resurfacing work is contracted out. Striping of new pavement and upgrade or installation of new guardrail is also completed by private contractors.

- Bridge maintenance—bridge maintenance work is contracted out including bridge
 painting, deck repair and replacement, superstructure and substructure repair and
 corrective maintenance, and all bridge rehabilitation or reconstruction.
- Bridge inspection—a portion of bridge inspections are provided by private contractors.
- Operations—Smart Traffic Center operations are delivered through contract in the Hampton Roads. Safety Service Patrols are outsourced in the Hampton Roads, Northern Virginia, and Salem, and will also be provided through private contract in Richmond beginning in FY 2008.
- Nearly all guardrail upgrades and guardrail replacement is conducted by private contractors.
- Installation of signals and electronic signing is nearly all conducted by private contractors.

Area Headquarters Consolidation.

As VDOT outsourced more work to the private sector, the agency had to adjust how its workforce was deployed and make the best use of facilities and equipment. By law, the department is in the process of outsourcing all Interstate maintenance by July 1, 2009 (see TAMS discussion). VDOT conducted an analysis of population, superintendent workload, response times and the number of lane miles maintained by each area headquarters. The agency then engaged field staff to review the results and adjust them to reflect actual field operational considerations. The agency identified 87 properties for consolidation.

Sign Shops

VDOT conducted a study to investigate methods of improving highway sign procurement and production. Currently, VDOT employs a mix of outsourcing and in-house sign production in eight districts. The Department has decided to consolidate all statewide internal sign production to one production facility in the Richmond District and to close the remaining six facilities. VDOT is currently soliciting proposals to have the private sector meet all Interstate sign needs to include procurement, upgrade, and maintenance.

<u>Devolution – City of Suffolk and James City County</u>

VDOT presents four options available to all localities regarding Secondary system devolution: a maintenance-only devolution; a construction-only devolution; maintenance & construction devolution; and, full devolution. To assist in this effort, VDOT has developed an analytical model for all counties to utilize when considering any of the above options.

In July 2006, the City of Suffolk chose the maintenance only option. James City County filed a notice of intent to accept construction and maintenance responsibility on the Secondary system on June 27, 2006. On September 11, 2007, James City County passed a resolution to accept construction and maintenance responsibilities.

Dulles Toll Road

VDOT has entered into an operating permit agreement with the Washington Metropolitan Area Transit Authority to assume full control of the maintenance and operations of the Dulles Toll Road. It is expected that this transfer will occur sometime during calendar year 2008.

Employment Levels

Since 1986 (see Figure 9), the agency's commitment to outsourcing, devolution, and internal efficiency initiatives has resulted in an overall staff level reduction of 1,671 employees (-16.3%) during a time when the transportation infrastructure has expanded by approximately 7.6 percent (increase of 8,700+ lane miles).

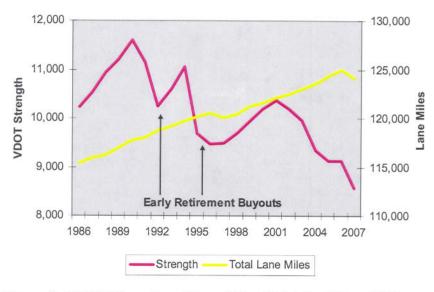


Figure 9. VDOT Strength and Lane Miles Maintained Since 1986

In the past five years, direct service-delivery responsibilities have continued to shift from the state workforce to private contractors across all areas of the agency. From 2002 to 2007, VDOT reduced the number of classified employees significantly (as shown in Figure 10).

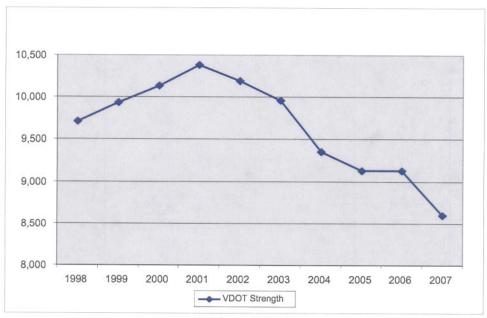


Figure 10. Historical VDOT Strength

Figure 11 compares functional staff levels for Engineering and Construction Management, Maintenance and Operations, Planning and Program Management, and Administration.

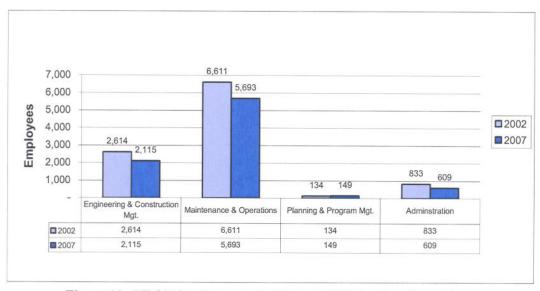


Figure 11. VDOT Staffing Levels 2002 and 2007 by Functional Area

VDOT employment levels are expected to remain relatively constant for the FY 2009-2010 biennium with no major reductions.

APPENDIX

VDOT's Approach to Asset Management

"Asset Management" has been defined in § 33.1-23.02 of the *Code of Virginia* as "a systematic process of operating and maintaining the state system of highways by combining engineering practices and analysis with sound business practices and economic theory to achieve cost-effective outcomes." The asset management approach to maintenance of the highway network assets reflects a comprehensive view of the highway network assets' performance. Resource allocation decisions are based on the desired system condition, level of service, and safety provided to customers.

VDOT's asset management approach is based on the following goals:

- Manage assets based on a life-cycle cost analysis approach
- Develop and implement performance measures as the basis for identifying and prioritizing maintenance and operations needs
- Develop predictive models that link inventory, work activities, utilization, and environmental conditions to asset condition and system performance, to generate performance based needs assessments
- Employ processes to plan, budget, implement, monitor and measure performance

VDOT's asset management methodology follows the American Association of State Highway Transportation Official's (AASHTO) model for asset management, which includes:

- Performance objectives
- Asset inventory
- Condition assessment
- Investment analysis
- · Planning, programming, and budgeting
- Program implementation
- Performance monitoring

VDOT is in various stages of developing and implementing business processes, technology and applications to address each of these objectives. Ultimately, data collection, analysis and assessment of needs on the existing infrastructure should provide information not only to planning and budgeting for maintenance and operations but to capital planning for capacity expansion and enhancement as well. Currently, asset management information is used only for planning and budgeting maintenance and operations.

VDOT's Asset Management Methodology is supported by technology, data, and software applications referred to as the Asset Management System (AMS). The AMS includes the following:

- Inventory and condition information gathered on 100 percent of Interstate and Primary, and 20 percent of Secondary system pavements, 100 percent of bridges and large culverts, and a district level statistical sample of pipes, paved and unpaved ditches, unpaved shoulders, guardrail, guardrail terminals, pavement markings, and signs;
- Pavement management system integrates data on structural composition, current and historic condition, and maintenance work history with predictive modeling and economic decision tools to generate performance based needs assessments;
- Bridge management system integrates current and historic condition information on each bridge structural element with predictive modeling and economic decision tools to generate performance based needs assessments;
- Random Condition Assessment involves processing a statistical sample of condition information for eight assets through a maintenance repair assignment and cost model, using observed asset density, number of samples, and directional mileage to generate extrapolated statewide and district level total inventories for each asset and percent of inventory needing work by repair group, applying deterioration rates to enable performance based predictive modeling and needs assessment;
- Financial information from VDOT's Financial Management System includes historic expenditures; and
- Work Accomplishments an activity based work tracking system

Development of the AMS is not complete. Current development initiatives include:

- Development of performance measures and the supporting data, technology, methods, and system tools to facilitate performance based needs assessment of other assets such as traffic signals, overhead signs, tunnels, rest areas, ferries, smart traffic devices, movable bridges, and paved shoulders. Currently, these assets are assessed using various combinations of data on inventory, life cycle maintenance recommendations, replacement costs, activity based unit costs, maintenance history, and historic expenditures. District level needs are developed by central office business contacts with input and collaboration from the districts and regions
- Development of business requirements for a statewide inventory management system;
- Development of business requirements for a project planning and development system;
- Development of process and system tools needed to conduct six-year programming of the Maintenance and Operations Program; and
- Research to develop performance measures, and the supporting data, technology, and system tools to facilitate needs assessments for safety and operations and to integrate those technologies and data into the AMS

Needs for VDOT programs and services such as roadside management, storm water management, snow & ice control, emergency services such as Safety Service Patrol, and management and direction are currently based on historic expenditures adjusted for inflation. Performance standards and measures are being developed for these and other programs.

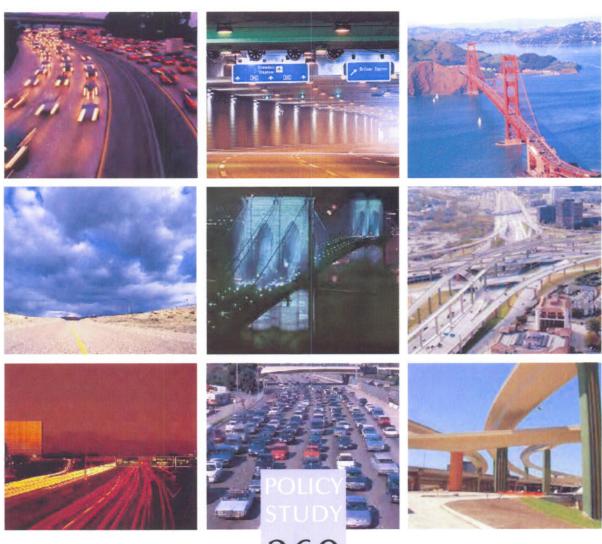
Equipment replacement needs are identified using the VDOT Rental Equipment Budget System (REBS). This system identifies total replacement needs for each district based on established statewide replacement criteria for each class of equipment. All users of VDOT equipment are

charged a rental rate set to recoup fuel, maintenance, depreciation, and program administration costs. Surplus equipment is auctioned off periodically in an effort to recoup salvage value on each piece of equipment. Revenue from rental and salvage sales is used to offset the cost of purchasing new equipment.



16th Annual Report on the Performance of State Highway Systems (1984–2005)

By David T. Hartgen, Ph.D., P.E., and Ravi K. Karanam Project Director: Adrian T. Moore, Ph.D.



360



Reason Foundation

Reason Foundation's mission is to advance a free society by developing, applying, and promoting libertarian principles, including individual liberty, free markets, and the rule of law. We use journalism and public policy research to influence the frameworks and actions of policymakers, journalists, and opinion leaders.

Reason Foundation's nonpartisan public policy research promotes choice, competition, and a dynamic market economy as the foundation for human dignity and progress. Reason produces rigorous, peer-reviewed research and directly engages the policy process, seeking strategies that emphasize cooperation, flexibility, local knowledge, and results. Through practical and innovative approaches to complex problems, Reason seeks to change the way people think about issues, and promote policies that allow and encourage individuals and voluntary institutions to flourish.

Reason Foundation is a tax-exempt research and education organization as defined under IRS code 501(c)(3). Reason Foundation is supported by voluntary contributions from individuals, foundations, and corporations. The views are those of the author, not necessarily those of Reason Foundation or its trustees.

Copyright © 2007 Reason Foundation. All rights reserved.

16th Annual Report on the Performance of State Highway Systems (1984–2005)

By David T. Hartgen, Ph.D., P.E. and Ravi K. Karanam Project Director: Adrian T. Moore, Ph.D.

This is the 16th annual report in a series on the condition and performance of the U.S. state-owned road system. The report is supported this year by Reason Foundation, a public policy research institution. The views expressed in the report are solely those of the authors. Copyright 2007 by the authors. Permission to copy and reproduce by electronic or paper means with appropriate credit is given.

Table of Contents

Overview	1
Cost-Effectiveness Rankings of the States	4
Trends in Performance Indicators:	7
System Extent	8
Resources	
System Performance	
Individual State Results	27
Alabama	27
Alaska	27
Arizona	27
Arkansas	28
California	28
Colorado	28
Connecticut	28
Delaware	29
Florida	29
Georgia	29
Hawaii	30
Idaho	30
Illinois	30
Indiana	31
lowa	31
Kansas	31
Kentucky	31
Louisiana	32
Maine	32
Maryland	32
Massachusetts	33
Michigan	33
Minnesota	33
Mississippi	33
Missouri	34
Montana	34

Nebraska34
Nevada
New Hampshire35
New Jersey
New Mexico
New York
North Carolina
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
Rhode Island
South Carolina
South Dakota
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming
About the Authors42
Related Reason Studies43
Endnotes44

Tables and Figures

Table 1A: Expenditures and Performance of State-Owned Highways, 1998-2005	2
Table 1B: State Ranks	5
Table 2: State-Controlled Highway Mileage	8
Table 3: State Highway Agency Mileage	
Table 4: Receipts per State-Controlled Mile	10
Table 5: Capital & Bridge Disbursements per State-Controlled Mile	11
Table 6: Maintenance Disbursements per State-Controlled Mile	12
Table 7: Administrative Disbursements per State-Controlled Mile	13
Table 8: Total Disbursements per State-Controlled Mile	14
Table 9: Rural Interstate Condition	15
Table 10: Urban Interstate Condition	17
Table 11: Rural Arterial Condition	19
Table 12: Urban Interstate Congestion	21
Table 13: Deficient Bridges	23
Table 14: Fatality Rates	24
Table 15: Rural Narrow Lanes	
Figure 1: Trends in U.S. Highway Performance Indicators	
Figure 2: Overall Rank	6
Figure 3: Rural Interstate: Poor Condition Rank	16
Figure 4: Urban Interstate: Poor Condition Rank	18
Figure 5: Rural Arterial Condition: Poor Condition Rank	20
Figure 6: Urban Interstate Congestion Rank	22
Figure 7: Fatality Rates	25

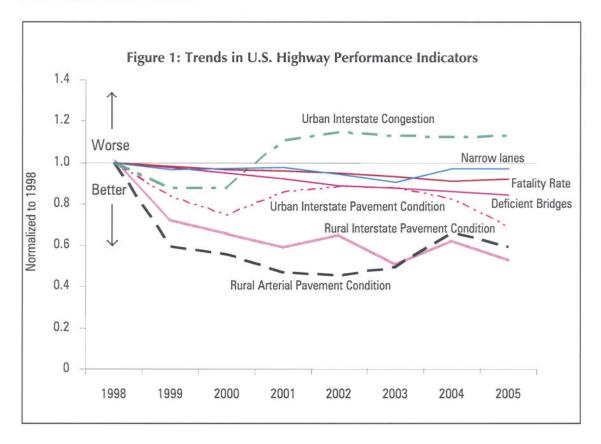
Part 1

Overview

The states reversed the 2004 declines in highway condition by spending federal funds approved by Congress in 2005 for improved pavements, bridge repairs, and congestion relief. The nation's continuing trend of generally improving highway performance from 1998 to 2003 was reestablished in 2005.

Federal highway funds increased about 13 percent between 2004 and 2005, as the states saw the first full year of additional funds from the new federal highway program. Capital and bridge expenditures increased 12 percent and maintenance expenditures increased 11 percent.

Administrative costs were flat.



The states converted the additional funding into improved performance. The percent of roads in poor condition fell sharply for both the interstate and rural primary roads. Increasingly, the remaining serious pavement condition problems are confined to just a few states. The percentage of bridges rated deficient also improved slightly. The states also held their ground on congestion and narrow lanes. But accident rates crept up slightly.

Substantial as it is, this progress was offset slightly by several troublesome problems. The condition of secondary and local roads continues to worsen. Over one half of urban interstates remain congested, and the states' ability to deal with congestion seems to be slowing. And one quarter of the nation's bridges are still rated 'deficient'; at the current improvement rate it will take 50 years to eliminate bridge deficiencies. Highway fatalities have edged up, increasing the fatality rate slightly. And sharp increases in highway construction costs in 2005–2006 mean that fewer repairs can be made from the same dollars.

This 16th annual study tracks the performance of the state-owned roads from 1984 to 2005. Twelve indicators—covering the states' highway revenues and expenditures, pavement and bridge condition, congestion, accident rates, and narrow lanes—make up each state's overall rating. The study is based on spending and performance data submitted to the federal government by the state highway agencies.

Table 1A: Expenditures and Performance of State-Owned Highways, 1998-2005				
Statistic	1998	2004	2005	Percent Change, 04-05
Total Revenues, All Sources, \$B	\$67.80	\$90.68	\$102.71	13.27
Total Expenditures, \$B	\$66.40	\$87.69	\$98.91	12.80
Expenditures, Capital/Bridges, \$B	\$36.30	\$47.74	\$50.31	5.38
Expenditures, Maintenance, \$B	\$11.40	\$14.29	\$15.94	11.55
Expenditures, Administration, \$B	\$4.70	\$6.32	\$6.36	0.63
Highway Construction Price Index	126.9	154.4	175.4	13.6
Rural Interstate, Percent Poor Condition	3.25	2.02	1.73	-15.84
Urban Interstate, Percent Poor Condition	8.69	7.13	5.97	-16.27
Rural Primary, Percent Poor Condition	1.42	0.94	0.85	-9.57
Urban Interstate, Percent Congested	45.90	51.60	51.85	0.48
Bridges, Percent Deficient	29	25.03	24.53	-2.12
Fatality Rate per 100 Million Miles Driven	1.58	1.440	1.453	0.69
Rural Primary, Percent Narrow Lanes	11.04	10.72	10.72	-0.19

Bold = Worsened

The study also found wide variations among the states in road performance. Just six states (New York, Alabama, California, Utah, Alaska and Michigan) have over 60 percent of the poor rural interstate mileage in the country. And four states (California, Minnesota, New Jersey and North Carolina) have more than 70 percent of their urban interstates congested. The states also vary widely by fatality rates. Massachusetts reported the lowest rate, Montana the highest.

Congress passed new highway legislation in August 2005. The federal bill increased highway funding by about 40 percent over 1998 levels. Congress did not address fundamental reforms in how road projects are financed, so the action averted a looming drop in highway performance. But there is still cause for concern about the lack of progress in reducing congestion. It is simply unacceptable for half of urban interstates to be congested. We need to spend our dollars on real problems, not frills. States need to re-think their priorities and focus more on congestion reduction and mobility provision.

Part 2

Cost-Effectiveness Rankings of the States

This report continues its annual ranking of the state highway systems on costs versus effectiveness. Since the states have different budgets, system sizes and traffic, comparative performance depends on both system quality and on resources available. To determine relative performance, state highway budgets (per mile of responsibility) are compared with system performance, state by state. States ranked high typically have good-condition systems along with relatively thin budgets.¹

The following table shows the results for 2005. For 2005, the top three states in overall cost-effectiveness—North Dakota, South Carolina and Kansas—are followed by New Mexico, Montana, Georgia, Wyoming, Oregon, Nevada and Idaho.

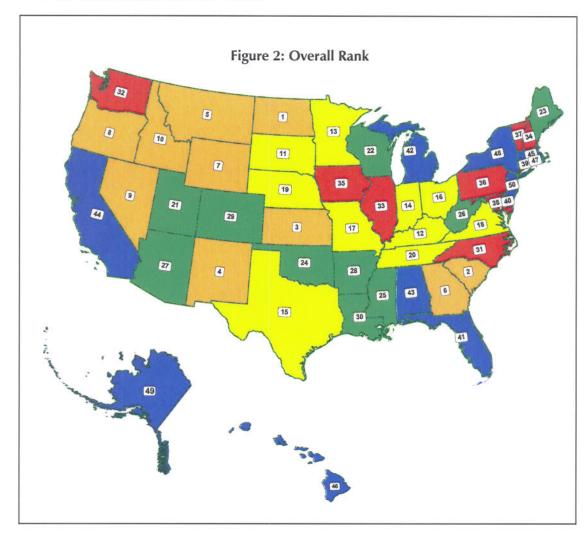
Several states improved their rankings sharply from 2004:

- Missouri jumped from 28th to 17th after sharp improvements in its pavement condition.
- Nevada moved up 12 positions from 21st to 9th.
- Indiana moved up from 23rd to 14th.
- Montana moved up from 13th to 5th.

2005 Overall Cost-	State	1998 Overall Cost-	2004 Overall Cost-	Change, 2004-2005
ffectiveness Rank		Effectiveness Rating	Effectiveness Rank	
1	North Dakota	1	1	0
2	South Carolina	4	2	0
3	Kansas	11	6	3
4	New Mexico	31	4	0
5	Montana	3	13	8
6	Georgia	6	3	-3
7	Wyoming	2	9	2
8	Oregon	8	5	-3
9	Nevada	13	21	12
10	Idaho	5	7	-3
11	South Dakota	15	14	3
12	Kentucky	9	10	-2
13	Minnesota	32	12	-1
14	Indiana	23	23	9
15	Texas	7	8	-7
16	Ohio	28	17	1
17	Missouri	14	28	11
18	Virginia	18	11	-7
19	Nebraska	17	16	-3
20	Tennessee	26	19	-1
21	Utah	30	27	6
22	Wisconsin	29	18	-4
23	Maine	12	22	-1
24	Oklahoma	27	20	-4
25	Mississippi	19	26	1
26	West Virginia	22	15	-11
27	Arizona	20	29	2
28	Arkansas	47	33	5
29	Colorado	45	36	7
30	Louisiana	39	34	4
31	North Carolina	35	30	-1
32	Washington	24	38	6
33	Illinois	36	32	-1
34	New Hampshire	16	25	-9
35	lowa	25	31	-4
36	Pennsylvania	33	35	-1
37	Vermont	34	24	-13
38	Maryland	37	43	5
39	Connecticut	41	40	1
40	Delaware	38	37	-3
41	Florida	40	41	0
42	Michigan	42	39	-3
43	Alabama	10	42	-3
44	California	44	45	1
45	Massachusetts	49	48	3
46	Hawaii	46		-2
47			44	
	Rhode Island	43	47	0
48 49	New York Alaska	48	49	-3
	HISKS	71	46	-3

On the other hand, several states lost ground between 2004 and 2005:

- Vermont slipped from 24th to 37th.
- New Hampshire slipped from 25th to 34th.
- West Virginia slipped form 15th to 26th.



Detailed data and trends in rankings for each of the states are shown in the attached tables:

Go to reason.org/ps360.shtml for Overall State Ranks and Comparative Performance of State Highway Systems

Part 3

Trends in Performance Indicators

etails on the trends of performance measures follow. Selected system condition measures are also shown in the attached maps.

System Extent

State-Controlled Miles.

State-controlled miles include the State Highway Systems, state-agency toll roads, some ferry services, and state-owned systems serving universities and state parks. Nationwide, about 812,871 miles are under state control (Table 2, State-Controlled Highway Mileage), about 2000 more than in 2004. The smallest state-owned road systems continue to be Hawaii (975 miles) and Rhode Island (1,102 miles); the largest in Texas (79,651 miles) and North Carolina (79,779 miles). North Carolina has replaced Texas as the state with largest state-owned system.

Table 2: State-Controlled Highway Mileage		
Rank	State	Mileage
1	North Carolina	79,779
2	Texas	79,651
3	Virginia	57,884
4	Pennsylvania	43,283
5	South Carolina	41,582
6	West Virginia	34,051
7	Missouri	32,464
8	Kentucky	27,753
9	Ohio	22,461
10	Georgia	18,274
11	California	18,230
12	Washington	17,836
13	Louisiana	16,696
14	Illinois	16,521
15	Arkansas	16,444
16	New York	15,707
17	Tennessee	14,163
18	Oklahoma	13,389
19	Minnesota	13,182
20	New Mexico	12,205
21	Oregon	12,265
22	Florida	12,040
23	Wisconsin	11,794
24	Indiana	11,183
25	Alabama	11,124
26	Mississippi	10,948
27	Montana	10,789
28	Kansas	10,548
29	Colorado	10,343
30	Nebraska	10,256
31	Michigan	9,735
32	lowa	9,266
33	Maine	8,684
34	South Dakota	8,038
35	North Dakota	7,405
36	Wyoming	7,404
37	Arizona	6,959
38	Alaska	6,420
39	Nevada	5,922
40	Utah	5,868
41	Maryland	5,277
42	Delaware	5,243
43	Idaho	4,957
44	New Hampshire	4,004
45	Connecticut	3,960
46	Massachusetts	3,257
47	New Jersey	2,906
48	Vermont	2,844
49	Rhode Island	1,102
50	Hawaii	975
Total	- MYYMII	812,871
Vlean		16,257

State Highway Agency Mileage.

About 775,860 miles are the responsibility of the 50 state highway agencies (Table 3, State Highway Agency Mileage). In most states these are generally the Interstates and other major U.S.-numbered and state-numbered roads, but a few states also manage major portions of the rural road system. A few states (New Jersey, Florida, California, and Massachusetts) manage significantly wider roads.

able	3: State Highv	vay Agency	Mileage	
Rank	State	Miles	Lane miles	Ratio
1	West Virginia	33,987	69,955	2.06
2	Alaska	5,659	11,658	2.06
3	Maine	8,548	18,136	2.12
4	North Carolina	79,031	168,655	2.13
5	Virginia	57,860	125,165	2.16
6	South Carolina	41,391	89,543	2.16
7	Delaware	5,243	11,502	2.19
8	Pennsylvania	39,890	88,320	2.21
9	Kentucky	27,510	60,971	2.22
10	New Hampshire	3,975	8,819	2.22
11	Arkansas	16,444	36,665	2.23
12	Missouri	32,464	72,645	2.24
13	Nebraska	9,975	22,440	2.25
14	Montana	10,789	24,480	2.27
15	North Dakota	7,382	16,832	2.28
16	Vermont	2,634	6,045	2.29
17	Louisiana	16,693	38,447	2.30
18	South Dakota	7,873	18,135	2.30
19	Kansas	10,370	23,917	2.31
20	Wyoming	6,757	15,590	2.31
21	Texas	79,648	190,570	2.39
22	Nevada	5,399	13,072	2.42
23	Oregon	7,532	18,239	2.42
24	Idaho	4,957	12,041	2.43
25	Oklahoma	12,285	29,936	2.44
26	New Mexico	11,990	29,291	2.44
27	Minnesota	11,871	29,086	2.45
28	Mississippi	10,896	26,756	2.46
29	Wisconsin	11,782	29,325	2.49
30	Colorado	9,106	22,942	2.52
31	Indiana	11,183	28,317	2.53
32	Ohio	19,292	48,857	2.53
33	New York	15,033	38,084	2.53
34	Alabama	10,955	28,067	2.56
35	lowa	8,895	22,837	2.57
36	Illinois	16,103	41,833	2.60
37	Tennessee	13,817	35,941	2.60
38	Hawaii	928	2,415	2.60
39	Utah	5,858	15,260	2.60
40	Washington	7,045	18,367	2.61
41	Georgia	17,930	47,003	2.62
42	Rhode Island	1,102	2,898	2.63
43	Connecticut	3,717	9,777	2.63
44	Arizona	6,800	18,503	2.72
45	Michigan	9,698	27,567	2.84
46	Maryland	5,140		
47	Massachusetts		14,621	3.07
47	California	2,849 15,213	8,756 50,559	
49	Florida		41,477	3.32
		12,040		3.44
50 Total	New Jersey	2,321	8,486	3.66
TOTAL		775,860	1,838,803	

Resources

Receipts for State-Administered Roads.

The states obtain their road funds primarily from state-imposed road user fuel taxes and fees, the federal government, general funds, tolls, bonds and other financial initiatives. In 2005 the states received about \$102.71 billion for state-administered roads, up sharply 13.3 percent from 2004 (Table 4, Receipts per State-Controlled Mile). This reflects the first full year of SAFETEA-LU funding. Since 1984, per-mile receipts for state-owned roads have increased about 218.7 percent. In 2005, receipts per mile of responsibility averaged \$126,354, and ranged from a low of \$36,890 per mile of responsibility for South Carolina to a high of \$2,370,630 for New Jersey.

Fable 4: Receipts per State-Controlled Mile		
Rank	State	Receipts / mile
1	South Carolina	\$36,890
2	North Dakota	\$42,199
3	West Virginia	\$42,804
4	North Carolina	\$43,715
5	Montana	\$46,948
6	Missouri	\$50,099
7	South Dakota	\$53,079
8	Virginia	\$55,063
9	Arkansas	\$55,320
10	New Mexico	\$56,765
11	Wyoming	\$58,822
12	Nebraska	\$61,427
13	Maine	\$67,954
14	Oklahoma	\$71,894
15	Kentucky	\$75,688
16	Louisiana	\$79,773
17	Mississippi	\$83,296
18	Kansas	\$83,832
19	Idaho	\$85,571
20	Vermont	\$89,492
21	Alaska	\$93,028
22	Iowa	\$94,827
23	Georgia	\$95,933
24	Oregon	\$98,766
25	New Hampshire	\$103,380
26	Minnesota	\$104,546
27	Tennessee	\$106,015
28	Washington	\$107,373
29	Texas	\$108,820
30	Pennsylvania	\$111,874
31	Alabama	\$112,652
32	Ohio	\$117,624
33	Indiana	\$126,436
34	Utah	\$135,117
35	Nevada	\$143,812
36	Wisconsin	\$148,768
37	Colorado	\$150,818
38	Delaware	\$203,616
39	Michigan	\$240,272
40	Illinois	\$249,760
41	Arizona	\$265,039
42	Maryland	\$274,984
43	Connecticut	\$344,347
44	Rhode Island	\$365,624
45	California	\$397,951
46	Hawaii	\$533,169
47	New York	\$600,702
48	Florida	\$600,702
48	Massachusetts	
50	New Jersey	\$753,892
Mean	New Jersey	\$2,370,630 \$126,354

Capital and Bridge Disbursements.

Capital and bridge disbursements for state-owned roads totaled \$50.309 billion in 2005, about 5.4 percent higher than in 2004 (Table 5, Capital and Bridge Disbursements per State-Controlled Mile). This again reflects the "surge" forward due to financing from SAFETEA-LU. Since 1984, per-mile capital and bridge disbursements have increased about 209.4 percent. Capital and bridge disbursements averaged \$61,891, up 5.4 percent from 2004. On a per-mile basis, 2005 capital and bridge disbursements ranged from a low of \$17,935 in South Carolina to a high of \$599,979 in New Jersey.

Table 5: Capital	& Bridge	Disbursements per
State-Controlled	Mile	

Rank	State	Disbursements/mil
1	South Carolina	\$17,935
2	Virginia	\$19,297
3	West Virginia	\$19,778
4	New Hampshire	\$21,350
5	New Mexico	\$24,049
6	North Carolina	\$26,013
7	Missouri	\$28,979
8	Maine	\$29,542
9	Kentucky	\$30,546
10	Montana	\$33,438
11	Oklahoma	\$35,719
12	Wyoming	\$36,132
13	Nebraska	\$37,695
14	North Dakota	\$38,431
15	Arkansas	\$38,853
16	South Dakota	\$40,046
17	Vermont	\$43,798
18	Pennsylvania	\$49,030
19	Mississippi	\$51,202
20	lowa	
		\$57,083
21	Louisiana	\$57,649
22	Colorado	\$58,392
23	Alaska	\$58,975
24	Oregon	\$59,961
25	Washington	\$62,734
26	Tennessee	\$63,348
27	Georgia	\$63,433
28	Idaho	\$64,862
29	Minnesota	\$64,971
30	Kansas	\$67,029
31	Delaware	\$68,231
32	Ohio	\$70,710
33	Texas	\$71,457
34	Indiana	\$74,421
35	Alabama	\$77,516
36	Wisconsin	\$80,287
37	Utah	\$81,573
38	Nevada	\$87,716
39	Illinois	\$117,654
40	Arizona	\$124,426
41	Michigan	\$135,271
42	Connecticut	\$140,322
43	New York	\$147,011
44	California	\$157,164
45	Rhode Island	\$167,735
46	Maryland	\$186,348
47	Hawaii	100000000000000000000000000000000000000
48	Florida	\$214,810 \$337,530
49	Massachusetts	
- vicinities	New Jersey	\$353,552
50	New Jersey	\$599,979
Mean		\$61,891

Maintenance Disbursements.

Maintenance disbursements increased sharply, 11.5 percent from 2004 to 2005 to \$15.94 billion, and accounted for about 16.1 percent of total disbursements (Table 6, Maintenance Disbursements per State-Controlled Mile). Since 1984 per-mile maintenance disbursements have increased about 165.3 percent. On a per-mile basis 2005 maintenance disbursements per mile of responsibility averaged about \$19,615. The lowest per-mile maintenance disbursement was \$5,077 in North Dakota, the highest \$153,845 in New Jersey.

A STATE OF THE PARTY OF	ntrolled Mile	
Rank	State	Disbursements/mi
1	North Dakota	\$5,077
2	Montana	\$5,973
3	West Virginia	\$6,673
4	South Dakota	\$6,983
5	South Carolina	\$7,297
6	Mississippi	\$8,454
7	Kentucky	\$8,864
8	Oregon	\$9,048
9	Nebraska	\$9,891
10	North Carolina	\$9,933
11	Arkansas	\$10,092
12	Georgia	\$10,123
13	Idaho	\$11,678
14	Wyoming	\$11,895
15	lowa	\$13,382
16	Alabama	\$13,435
17	Oklahoma	\$13,685
18	Kansas	\$13,833
19	New Mexico	\$14,094
20	Wisconsin	\$14,155
21	Missouri	\$14,333
22	Nevada	\$14,693
23	Arizona	\$15,170
24	Tennessee	\$16,955
25	Utah	\$17,271
26	Texas	\$17,657
27	Virginia	\$18,282
28	Maine	\$18,831
29	Vermont	\$18,981
30	Ohio	\$19,203
31	Washington	\$20,129
32	Louisiana	\$21,319
33	Delaware	\$22,193
34	Alaska	\$25,512
35	Minnesota	\$26,084
36	Michigan	\$27,481
37	Pennsylvania	\$28,060
38	Illinois	\$29,497
39	Hawaii	\$32,291
40	Colorado	\$32,419
41	New Hampshire	\$34,034
42	Connecticut	\$34,034
43	Indiana	
44	California	\$37,884
		\$43,448
45	Maryland	\$51,132
46	Massachusetts	\$52,779
47	New York	\$71,744
48	Rhode Island	\$74,506
49	Florida	\$90,410
50	New Jersey	\$153,845
Mean		\$19,615

Administrative Disbursements.

Administrative disbursements increased slightly: they totaled \$6.36 billion in 2005, about 0.63 percent higher than in 2004 (Table 7, Administrative Disbursements per State-Controlled Mile). Administrative costs accounted for about 6.43 percent of total disbursements, down from 7.21 percent in 2004. Since 1984, per-mile administrative disbursements have increased about 199.4 percent. On a per-mile basis, 2005 administrative disbursements averaged \$7,824, ranging from a low of \$1,786 in North Dakota to a high of \$68,352 in New Jersey.

Table 7: Administrative Disbursements per State-Controlled Mile

Rank	State	Disbursements/mile
1	North Dakota	\$1,786
2	Arkansas	\$1,805
3	Missouri	\$1,989
4	South Carolina	\$2,061
5	West Virginia	\$2,356
6	Louisiana	\$2,837
7	Virginia	\$3,113
8	Maine	\$3,136
9	Texas	\$3,147
10	Montana	\$3,856
11	Mississippi	\$3,920
12	Kentucky	\$3,989
13	North Carolina	\$4,359
14	Nebraska	\$5,032
15	Idaho	\$5,135
16	lowa	\$5,148
17	Indiana	\$5,428
18	Wyoming	\$5,585
19	South Dakota	\$5,840
20	Washington	\$5,971
21	Oregon	\$6,095
22	Kansas	\$6,326
23	Colorado	\$6,856
24	Oklahoma	\$6,952
25	Alaska	\$7,172
26	Pennsylvania	\$7,260
27	Ohio	\$7,523
28	Nevada	\$7,684
29	Minnesota	\$9,702
30	Maryland	\$10,408
31	Tennessee	\$10,580
32	New Hampshire	\$10,659
33	Michigan	\$10,757
34		
35	Georgia New Mexico	\$11,201 \$11,466
36	Alabama	\$11,466
37	Vermont	\$12,066
38	Wisconsin	\$12,066
39	Illinois	
40		\$13,441 \$14,564
41	Utah Connecticut	
42	Florida	\$15,337
42	New York	\$16,109
44		\$18,687
	Rhode Island	\$24,481
45	Arizona	\$26,962
46	Delaware	\$37,172
47	Hawaii	\$49,924
48	California	\$50,614
49 50	Massachusetts New Jersey	\$60,807 \$68,352
		. VEO 9E9

Total Disbursements.

In total, the states disbursed about \$98.905 billion for state-owned roads in 2005, about 12.8 percent higher than in 2004 (Table 8, Total Disbursements per State-Controlled Mile). Since 1984, per-mile total disbursements have increased about 227.3 percent. On a per-mile basis, 2005 disbursements averaged \$121,674. The lowest disbursement per mile was \$31,262 in South Carolina, the highest \$2,360,450 in New Jersey.

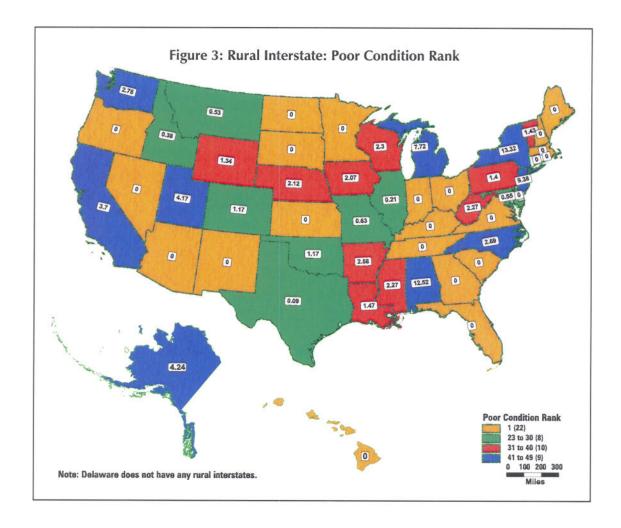
Rank	State	Disbursements/mile
1	South Carolina	\$31,262
2	West Virginia	\$41,839
3	North Carolina	\$44,654
4	Montana	\$46,905
5	North Dakota	\$47,685
6	Missouri	\$52,452
7	Virginia	\$53,569
8	Kentucky	\$54,091
9	South Dakota	\$55,216
10	Arkansas	\$55,642
11	Wyoming	\$57,558
12	Nebraska	\$59,717
13	New Mexico	\$67,581
14	Maine	\$68,344
15	Oklahoma	\$70,984
16	Mississippi	\$74,617
17	Louisiana	\$83,061
18	Idaho	\$87,687
19	lowa	\$87,886
20	New Hampshire	\$88,191
21	Vermont	\$91,719
22	Oregon	\$92,102
23	Tennessee	\$98,547
24	Alaska	\$99,819
25	Pennsylvania	\$100,558
26	Texas	\$106,221
27	Kansas	\$106,844
28	Georgia	\$109,005
29	Minnesota	\$110,066
30	Washington	\$110,094
31	Alabama	\$111,286
32	Ohio	\$122,839
33	Nevada	\$133,381
34	Colorado	\$135,251
35	Indiana	\$138,520
36	Utah	\$142,167
37	Wisconsin	\$153,700
38	Illinois	\$192,318
39	Delaware	\$210,522
40	Arizona	\$245,197
41	Michigan	\$252,879
42	Maryland	\$293,541
43	California	\$336,954
44	Connecticut	\$356,230
45	Rhode Island	\$361,106
46	Hawaii	\$491,498
47	New York	\$552,807
48	Florida	\$570,191
49	Massachusetts	\$893,236
50	New Jersey	\$2,360,450

System Performance

Rural Interstate Condition. In most states road condition is measured using special machines that determine the roughness of road surfaces. (A few states continue to use visual ratings). About 1.73 percent of U.S. rural interstates—532 miles out of 30,802—were reported in poor condition in 2005 (Table 9, Rural Interstate Condition, and Figure 3). This has improved sharply from 2004, when 2.02 percent of rural interstates were rated poor.

The amount of poor mileage varies widely. Twenty-two states reported no poor mileage, and six more reported less than 1 percent poor mileage. But four states reported more than 5 percent poor mileage, and two states (New York and Alabama) reported more than 10 percent poor mileage. Just six states (New York, Alabama, California, Utah, Alaska and Michigan) have 60 percent of the poor rural interstate mileage in the country. On the other hand, several states made great progress: Missouri, Pennsylvania and Louisiana made significant gains.

Table 9: R	e 9: Rural Interstate Condition		
Rank	State	% Poor	
1	Arizona	0.00	
1	Connecticut	0.00	
1	Florida	0.00	
1	Georgia	0.00	
1	Hawaii	0.00	
1	Indiana	0.00	
1	Kansas	0.00	
1	Kentucky	0.00	
1	Massachusetts	0.00	
1	North Dakota	0.00	
1	New Mexico	0.00	
1	Nevada	0.00	
1	Oregon	0.00	
1	Rhode Island	0.00	
1	South Carolina	0.00	
1	Virginia	0.00	
1	Tennessee	0.00	
1	South Dakota	0.00	
1	Ohio	0.00	
1	Maine	0.00	
1	Minnesota	0.00	
1	New Hampshire	0.00	
23	Texas	0.09	
24	Illinois	0.21	
25	Idaho	0.38	
26	Montana	0.53	
27	Maryland	0.55	
28	Missouri	0.63	
29	Colorado	1.17	
30	Oklahoma	1.17	
31	Wyoming	1.34	
32	Pennsylvania	1.40	
33	Vermont	1.43	
34	Louisiana	1.47	
35	lowa	2.07	
36	Nebraska	2.12	
37	West Virginia	2.27	
38	Mississippi	2.27	
39	Wisconsin	2.30	
40	Arkansas	2.58	
41	North Carolina	2.69	
42	Washington	2.78	
43	California	3.70	
44	Utah	4.17	
45	Alaska	4.24	
46	Michigan	7.72	
47	New Jersey	9.38	
48	Alabama	12.52	
49	New York	13.32	
-	Delaware	NA	
Mean		1.73	

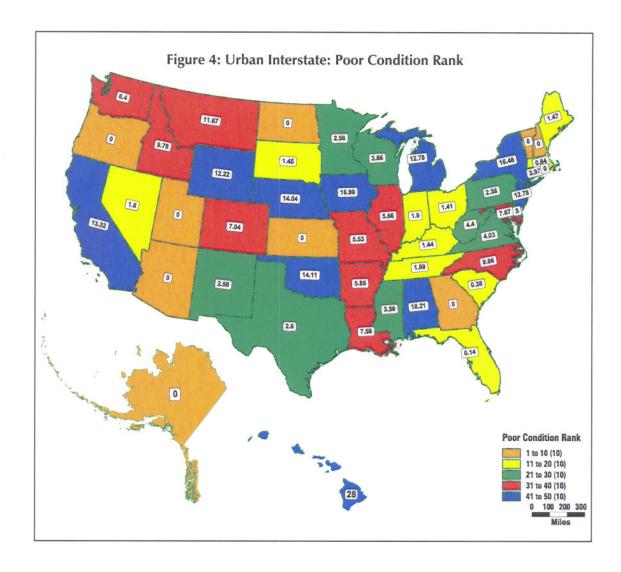


Urban Interstate Condition.

The urban interstates consist of major multi-lane interstates in and near urban areas. The condition of the urban interstate system also improved sharply in 2005, to 5.97 percent poor from 7.13 percent poor in 2004 (Table 10, Urban Interstate Condition, and Figure 4).

The condition of the urban interstate also varies widely. Ten widely scattered states reported no poor urban interstate mileage, while four states (Iowa, Hawaii, Alabama, and New York) reported more than 15 percent poor mileage. But just five states (California, New York, Michigan, Alabama and North Carolina) have half of the poor-mileage urban interstate in the country. Since 1998, the percentage of poor urban interstate mileage has been reduced about 31 percent.

lank	State	% Poor
1	Alaska	0.00
1	Arizona	0.00
1	Georgia	0.00
1	Kansas	0.00
1	North Dakota	0.00
1	New Hampshire	0.00
1	Oregon	0.00
1	Rhode Island	0.00
1	Utah	0.00
1	Vermont	0.00
11	Florida	0.14
12	South Carolina	0.38
13	Massachusetts	0.84
14	Ohio	1.41
15	Kentucky	1.44
16	South Dakota	1.45
17	Maine	1.47
18	Tennessee	1.69
19	Nevada	1.80
20	Indiana	1.90
21	Pennsylvania	2.38
22	Minnesota	2.56
23	New Mexico	2.58
24		
25	Texas	2.60
	Mississippi	3.59
26	Wisconsin	3.86
27	Connecticut	3.97
28	Virginia	4.03
29	West Virginia	4.40
30	Delaware	5.00
31	Missouri	5.53
32	Illinois	5.66
33	Arkansas	5.85
34	Washington	6.40
35	Colorado	7.04
36	Louisiana	7.59
37	Maryland	7.67
38	Idaho	9.78
39	North Carolina	9.96
40	Montana	11.67
41	Wyoming	12.22
42	Michigan	12.78
43	New Jersey	12.78
44	California	13.32
45	Nebraska	14.04
46	Oklahoma	14.11
47	New York	16.46
48	lowa	16.99
49	Alabama	18.21
50	Hawaii	28.00
1ean		5.97

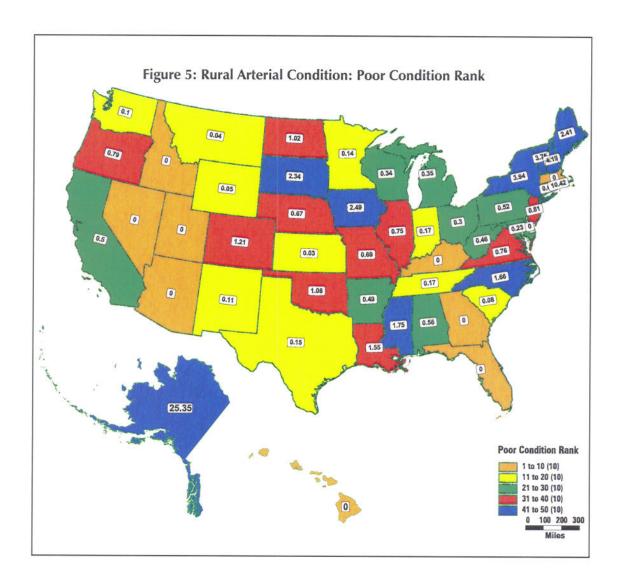


Rural Arterial Pavement Condition.

The condition of the major rural highways also improved sharply from 2004 to 2005. Overall, about 0.85 percent of the rural other principal arterial system—799 miles out of 94,216 were reported in poor condition (Table 11, Rural Arterial Condition, and Figure 5). This compares with 0.94 percent, or about 892 miles, in 2004. Since 1998, the percentage of poor rural primary mileage has decreased significantly, more than one-third.

The states also vary widely in condition. Ten states reported no poor rural primary mileage in 2005, whereas two states (New Hampshire and Alaska) reported large increases, from about 0 percent to over 10 percent, from 2003 to 2004. Three other states (Vermont, Rhode Island and New York) reported more than 3 percent poor. Just six states (Alaska, Iowa, New York, South Dakota, North Carolina, and Mississippi) account for more than half the poor rural primary mileage in the country.

Table 11: Rural Arterial Condition				
Rank	State	% Poor		
1	Arizona	0.00		
1	Delaware	0.00		
1	Florida	0.00		
1	Georgia	0.00		
1	Hawaii	0.00		
1	Idaho	0.00		
1	Kentucky	0.00		
1	Massachusetts	0.00		
1	Nevada	0.00		
1	Utah	0.00		
11	Kansas	0.03		
12	Montana	0.04		
13	Wyoming	0.05		
14	South Carolina	0.08		
15		0.10		
	Washington			
16	New Mexico	0.11		
17	Minnesota	0.14		
18	Texas	0.15		
19	Tennessee	0.17		
20	Indiana	0.17		
21	Maryland	0.23		
22	Ohio	0.30		
23	Wisconsin	0.34		
24	Michigan	0.35		
25	West Virginia	0.46		
26	Arkansas	0.49		
27	California	0.50		
28	Pennsylvania	0.52		
29	Alabama	0.56		
30	Connecticut	0.61		
31	Nebraska	0.67		
32	Missouri	0.69		
33	Illinois	0.75		
34	Virginia	0.76		
35	Oregon	0.79		
36	New Jersey	0.79		
37				
	North Dakota	1.02		
38	Oklahoma	1.08		
39	Colorado	1.21		
40	Louisiana	1.55		
41	North Carolina	1.66		
42	Mississippi	1.75		
43	South Dakota	2.34		
44	Maine	2.41		
45	lowa	2.49		
46	Vermont	3.75		
47	New York	3.94		
48	New Hampshire	4.19		
49	Rhode Island	10.42		
50	Alaska	25.35		
Mean		0.85		



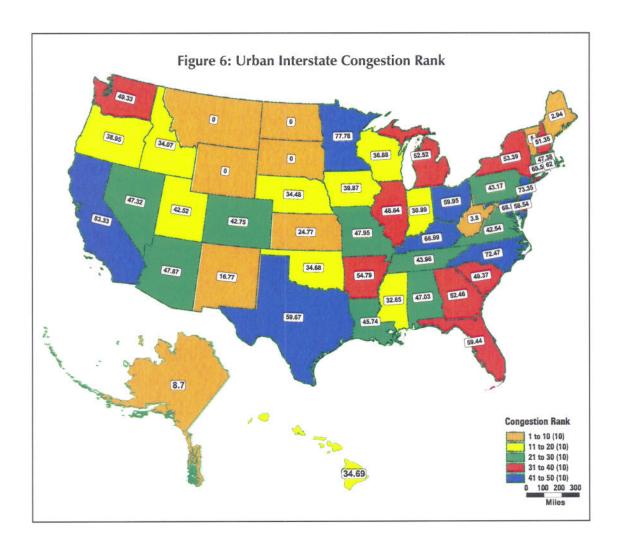
Urban Interstate Congestion.

There is no generally accepted definition of traffic congestion, but in reporting to the federal government the states use the volume-to-capacity ratios that are determined by Transportation Research Board's Highway Capacity Manual. The congestion measures for 2005 are not totally comparable with earlier years, since most states increased the rated capacities of Urban Interstates based on the 1997 and 2000 Highway Capacity Manuals.

Nevertheless, the overall 2005 statistic—51.85 percent congested—shows just a slight worsening from 2004 (51.60 percent congested) (see Table 12, Urban Interstate Congestion, and Figure 6). For 2005, about 8,051 miles out of 15,528 urban interstate miles were rated as having volume/capacity ratios greater than 0.70, the standard for mild congestion.²

The states vary widely in congestion levels. Four rural states report no congested urban interstates. But 17 states report more than half of urban interstates congested, and four states (California 83.3 percent, Minnesota 77.8 percent, New Jersey 73.4 percent and North Carolina 72.5 percent) report more than 70 percent of urban Interstates congested.

Table 12: Urban Interstate Congestion		
Rank	State	% Congested
1	Montana	0.00
1	North Dakota	0.00
1	South Dakota	0.00
1	Wyoming	0.00
5	Maine	2.94
6	West Virginia	3.80
7	Vermont	5.00
8	Alaska	8.70
9	New Mexico	16.77
10	Kansas	24.77
11	Indiana	30.99
12	Mississippi	32.65
13	Idaho	34.07
14	Nebraska	34.48
15	Oklahoma	34.68
16	Hawaii	34.69
17	Wisconsin	36.88
18	Oregon	38.95
19	lowa	39.87
20	Utah	42.52
21	Virginia	42.54
22	Colorado	42.75
	1.527.432.000.000	
23	Pennsylvania	43.17
24	Tennessee	43.96
25	Louisiana	45.74
26	Alabama	47.03
27	Nevada	47.32
28	Massachusetts	47.38
29	Arizona	47.87
30	Missouri	47.95
31	Illinois	48.64
32	Washington	49.33
33	South Carolina	49.37
34	New Hampshire	51.35
35	Georgia	52.46
36	Michigan	52.52
37	New York	53.39
38	Arkansas	54.79
39	Delaware	58.54
40	Florida	59.44
41	Texas	59.67
42	Ohio	59.95
43	Rhode Island	62.00
44	Connecticut	65.56
45	Kentucky	66.99
46	Maryland	68.58
47	North Carolina	72.47
48	New Jersey	73.35
49	Minnesota	77.78
50	California	83.33
Mean	Janonia	51.85



Deficient Bridges.

Federal law mandates the uniform inspection of all bridges for structural and functional adequacy at least every two years; bridges rated 'deficient' are eligible for federal repair dollars.

The condition of the nation's highway bridges continued to improve from 2004 to 2005. Of the 596,980 highway bridges in the current National Bridge Inventory, 147,913—about 24.52 percent—were reported deficient for 2005 (Table 13, Deficient Bridges), a slight improvement from 2004. In 1998 about 29.0 percent were rated deficient. However, progress is slow; at the current rate of improvement, it would take 50 years for the percentage of deficient bridges to be eliminated.

The states vary widely in the percentage of deficient bridges. Nevada reported the lowest percentage of deficient bridges, 3.89 percent, while Rhode Island reported the highest, 53.01 percent.

Table 13: Deficient Bridges				
Rank	State	% Deficient		
1	Nevada	3.89		
2	Arizona	5.50		
3	Wyoming	12.37		
4	Colorado	12.96		
5	Minnesota	13.16		
6	Wisconsin	15.93		
7	Delaware	16.55		
8	Utah	17.55		
9	Illinois	17.56		
10	California	17.59		
11	Florida	18.33		
12	New Mexico	18.43		
13	Idaho	18.91		
14	Tennessee	19.26		
15	Georgia	20.35		
16	Texas	20.56		
17	Kansas	21.05		
18	Montana	21.20		
19	Indiana	21.83		
20	Arkansas	22.24		
21	Virginia	22.46		
22	Alaska	22.84		
23	Ohio	23.61		
24	South Carolina	23.63		
25	North Dakota	24.24		
26	Nebraska	24.55		
27	Washington	24.55		
28	Alabama	24.94		
29	Oregon	25.34		
30	South Dakota	25.62		
31	Mississippi	26.42		
32	Maryland	26.93		
33	lowa	27.06		
34	Michigan	27.60		
35	New Jersey	27.91		
36	Maine	29.87		
37	New Hampshire	A CONTRACTOR OF THE CONTRACTOR		
38	Louisiana	30.54		
	North Carolina	30.67 30.91		
39 40		31.45		
41	Kentucky Missouri	31.47		
42	Oklahoma			
43		33.04 34.18		
	Connecticut			
44	Vermont Massachusetts	34.80		
45		36.38		
46	Hawaii Now York	36.85		
47	New York	37.08		
48	West Virginia	37.10		
49	Pennsylvania	39.00		
50	Rhode Island	53.01		
Mean		24.52		

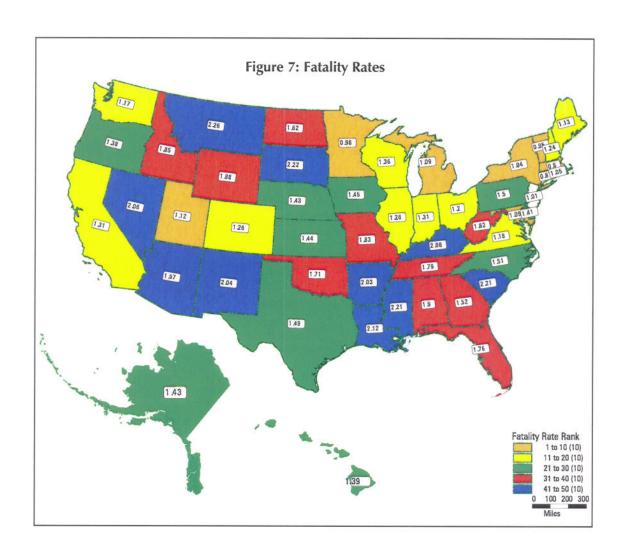
Fatality Rates.

Even though some highway fatalities occur on other than state-owned roads, overall fatality rates are an important overall measure of each state's road performance.

The nation's highway fatality rate increased slightly (Table 14, Fatality Rates, and Figure 7): for 2005, 43,395 fatalities were reported, higher than 42,593 reported for 2004. And, because travel continued to increase, the overall fatality rate was 1.453 fatalities per 100 million vehicle miles, up 0.9 percent from 1.440 in 2004.

The states also vary widely by fatality rates. For 2005, Massachusetts reported the lowest rate, 0.797, while Montana reported the highest, 2.256.

able 14	: Fatality Rates	
2005	State	Fatalities per 100 million vehicle mile
1	Massachusetts	0.797
2	Connecticut	0.865
3	Vermont	0.946
4	Minnesota	0.982
5	New Jersey	1.013
6	New York	1.039
7	Rhode Island	1.048
8	Michigan	1.085
9	Maryland	1.090
10	Utah	1.121
11	Maine	1.132
12	Washington	1.166
13	Virginia	1.179
14	Ohio	1.197
15	New Hampshire	1.236
16	Colorado	1.264
17	Illinois	1.264
18	Indiana	1.306
19	California	1.315
20	Wisconsin	1.358
21	Oregon	1.383
22	Hawaii	1.388
23	Delaware	1.409
24	Alaska	1.430
25	Nebraska	1.431
26	Kansas	1.445
27	lowa	1.449
28	Texas	1.490
29	Pennsylvania	1.496
30	North Carolina	1.515
31	Georgia	1.523
32	North Dakota	1.625
33	Oklahoma	1.706
34	Florida	1.758
35	Tennessee	1.793
36	West Virginia	1.822
- C12-7	Missouri	
37 38	Idaho	1.828
39	Wyoming	1.850
		1.877
40	Alabama	1.896
41	Arizona	1.968
42	Arkansas	2.027
43	New Mexico	2.036
44	Nevada	2.055
45	Kentucky	2.075
46	Louisiana	2.123
47	Mississippi	2.207
48	South Carolina	2.211
49	South Dakota	2.215
50	Montana	2.256
Mean		1.453



Narrow Lanes.

Narrow lanes on major rural roads are a key indicator of sight visibility and design adequacy. The national design standard for lane width on major rural roads is generally 12 feet, and few, if any, major rural roads would be improved without widening lanes to the standard.

In 2005, about 10.70 percent of rural other principal arterials—10,181 miles out of 95,134—had narrow lanes less than 12 feet wide (Table 15, Rural Narrow Lanes), slightly better than the 10.72 percent reported in 2004.

The states also vary widely by percentage of narrow lanes. Seven states reported no narrow-lane mileage, while West Virginia (41.81 percent) reported the highest percentage of narrow lanes.

Table 15:	Rural Narrow Lanes	
2005	State	% Narrow
1	Arizona	0
1	Delaware	0
1	North Dakota	0
1	New Jersey	0
1	Nevada	0
1	South Dakota	0
1	Utah	0
8	Idaho	0.52
9	Kansas	0.81
10	Montana	1.03
11	Connecticut	1.22
12	Georgia	1.34
13	Nebraska	1.56
14	Wyoming	1.86
15	Oklahoma	2.72
16	Wisconsin	2.79
17	Alaska	3.47
18	New Hampshire	3.63
19	Alabama	3.82
20	Rhode Island	4.17
21	Massachusetts	4.79
22	New Mexico	4.84
23	Minnesota	5.08
24	California	5.31
25	Indiana	6.14
26	Maryland	6.58
27	South Carolina	6.89
28	Oregon	7.07
29	Florida	7.6
30	lowa	8.26
31	Louisiana	9.77
32	Mississippi	10.34
33	North Carolina	12.46
34	Illinois	12.78
35	Colorado	13.24
36	Texas	14.05
37	Ohio	14.51
38	Kentucky	16.32
39	Michigan	19.5
40	Missouri	20.13
41	New York	23.07
42	Vermont	23.99
43	Tennessee	25.23
44	Maine	25.89
45	Arkansas	31.68
46	Virginia	32.18
47	Hawaii	32.43
48	Washington	39.42
49	Pennsylvania	40.58
50	West Virginia	41.81
Mean	-	10.70
		. 31.0

Part 4

Individual State Results

Alabama

In 2005, Alabama ranked **43**rd overall, compared with 11th in 2000. Alabama scored best on maintenance disbursements per mile (16th) and narrow rural primary arterials (19th). Its lowest ratings were for urban interstate in poor condition (49th), rural interstate in poor condition (48th) and fatality rate (40th). The state's system is deteriorating.



Alaska

Alaska, with a state-owned highway system of 6,420 miles, ranked **49**th in overall performance. The state has worsened in overall performance from 40th in 2000.

Alaska scored best in urban interstate condition (tie for 1st) with no poor urban interstate reported and 8th in urban interstate congestion. It is the state with the worst rural primary pavement condition (50th). It also ranked low in rural interstate condition (45th) and maintenance disbursements per mile (34th). In summary, the state is achieving a relatively good condition system, but at relatively high cost.

Arizona

Arizona has 6,959 miles of state-owned highway. Overall the state ranked **27**th in performance in 2005, compared with 28th in 2000. The state reported no rural interstate in poor condition, no rural primary pavement in poor condition, no urban interstate in poor condition and no narrow rural primary arterials. It scored high in bridge condition (2nd). The state ranked lowest for maintenance disbursements per mile of responsibility (49th), administrative disbursements per mile of responsibility (45th), receipts per mile of responsibility (41st), fatality rate (41st), capital/bridge disbursements per mile of responsibility (40th) and total disbursements per mile of responsibility (40th). So, the state's relatively good system performance comes at a relatively high unit cost.

Arkansas

Arkansas is one of the states that sharply improved in overall ranking from 46th in 2000 to **28th** in 2005. It scored best in administrative disbursements per mile (2nd), receipts per mile of responsibility (9th), total disbursements per mile (10th), maintenance disbursements per mile (11th) and capital/bridge disbursements per mile (15th). It scored lowest for percent rural primary arterials narrow (45th),



fatality rate (42nd), rural interstate pavement condition (40th) and urban interstate congestion (38th). So while the state has moved up in budget ratings, its system performance needs attention.

California

California reported 18,230 miles of state-owned highway in 2005. Compared to 2000 the state improved slightly from 45th in 2000 to 44th in 2005 in the overall rankings. The state ranked best in bridge condition (10th) and fatality rate (19th). But California has the worst urban interstate congestion (50th). It also scored low in administrative disbursements per mile of responsibility (48th), receipts per mile of responsibility (45th), capital/bridge disbursements per mile of responsibility (44th), maintenance per mile of responsibility (44th), urban interstate condition (44th), total disbursements per mile of responsibility (43rd) and rural interstate condition (43rd). Overall, California's relatively high costs per mile of responsibility are not translating into high performance.

Colorado

In 2005 Colorado reported a total of 10,343 miles of state-owned highway. The state ranked **29**th in the overall performance rankings in 2005, losing ground by ten positions as compared to 19th in 2000. Colorado scored best in bridge condition (4th) and fatality rate (16th). Its lowest ratings were for maintenance per mile of responsibility (40th), rural primary pavement condition (39th) and receipts per mile of responsibility (37th). Its relatively high costs per mile of responsibility are offset by only modest system performance.

Connecticut

Connecticut has a total of 3,960 miles of state-owned highway. The state ranked 39th in overall performance in 2005 as compared to 44nd in 2000. The state reported no rural interstate in poor condition. It also ranked high in fatality rate (2nd) and narrow rural primary arterials (11th). But Connecticut ranked lower for total disbursements per mile of responsibility (44th), urban interstate congestion (44th), bridge condition (43rd), receipts per mile of responsibility (43rd), capital/bridge disbursements per mile of

responsibility (42nd), maintenance disbursements per mile of responsibility (42nd) and administrative disbursements per mile of responsibility (40th). Essentially, its relatively high costs are offset by generally superior system performance.

Delaware

Delaware has 5,243 miles of highway under the state control. The state stood **40**th in the overall performance rankings in 2005, slightly up from 41st in 2000. Its best ratings were for rural primary pavement condition (1st), rural primary pavements narrow (1st) and deficient bridges (7th). Delaware has no rural interstate. Its lowest rankings were for administrative disbursements per mile of responsibility (41st), total disbursements per mile of responsibility (39th), urban interstate congestion (39th) and receipts per mile of responsibility (38th). Overall, its above-average system performance is offset by its relatively high unit costs.



Florida

The state of Florida has a total of 12,040 miles of state-owned highway. Overall the state ranked 41st in performance in 2005, compared to 38th in 2000. The state reported no rural interstate in poor condition and no rural primary pavement in poor condition. Florida also scored well on urban interstate in poor condition (11th) and bridge condition (11th). But Florida's lowest ratings were for maintenance per mile of responsibility (49th), receipts per mile of responsibility (48th), capital/bridge disbursements per mile of responsibility (48th), total disbursements per mile of responsibility (48th), administrative disbursements per mile of responsibility (42nd) and urban interstate congestion (40th). So, its superior condition status is offset by relatively high cost per mile of responsibility.

Georgia

Georgia has 18,274 miles of state-owned highway. In the performance ratings
Georgia ranked 6th in 2005 among the 50 states, compared to 4th in 2000. The state
reported no rural interstate in poor condition, no rural primary pavement in poor
condition and no urban interstate in poor condition. Hence it tied for 1st in all the
above categories. Apart from these, its best rankings were for maintenance
disbursements per mile of responsibility (12th), rural other primary arterials narrow (12th) and
deficient bridges (15th). It scored lowest in urban interstate congestion (35th) and administrative
disbursements per mile of responsibility (34th). Georgia has managed to achieve a good balance of
system condition and expenditures which have yielded consistently good overall ratings over time.

Hawaii

Hawaii has the smallest state-owned highway system at 975 miles. Overall, the state ranked **46**th in the performance rankings in 2005 as compared to 48th in 2000. Its best rankings were for rural interstate condition (1st), rural primary pavement condition (1st), urban interstate congestion (16th) and administrative disbursements per mile of responsibility (16th). Its lowest ratings were for urban interstate condition (50th), capital/bridge disbursements per mile of responsibility (47th), rural primary pavements narrow (47th), receipts per mile of responsibility (46th), total disbursements per mile of responsibility (46th) and deficient bridges (46th). So, the state has relatively high unit costs which are only partially offset by some good-condition indicators.

Idaho

In 2005, Idaho reported 4,957 miles of state-owned highway. Overall the state ranked 10th in performance in 2005, compared with 9th in 2000. Idaho scored best on rural primary pavement condition (1st) with none in poor condition reported, rural primary arterials narrow (8th), maintenance disbursements per mile of responsibility (13th), urban interstate congestion (13th), deficient bridges (13th) and administrative disbursements per mile of responsibility (15th). It scored lowest on urban interstate condition (38th) and fatality rate (38th). Idaho's relatively good system condition is generally accompanied by relatively low unit costs, resulting in overall sound performance over

Illinois

time.

Illinois has 16,521 miles of highway under state control. In 2005, the state ranked 33rd in the overall performance ratings, compared with 35th in 2000. Its best ratings were for deficient bridges (9th), fatality rate (17th) and rural interstate condition (24th). Its lowest rankings were for receipts per mile of responsibility (40th), capital/bridge disbursements per mile of responsibility (39th), administrative disbursements per mile of responsibility (39th), maintenance disbursements per mile of responsibility (38th). Faced with difficult climate and traffic conditions, the state is nevertheless achieving good performance on some indicators at above-average costs.

Indiana

The state-owned highway system of Indiana constitutes 11,183 miles of highway.

Overall, the state ranked 14th in the performance ratings in 2005, compared with 17th in 2000. Its best rankings were for rural interstate condition (1st) with none in poor condition reported, urban interstate congestion (11th), administrative disbursements per mile of responsibility (17th), fatality rate (18th), deficient bridges (19th), rural primary pavement condition (20th) and urban interstate condition (20th). It scored lowest on maintenance disbursements per mile of responsibility (43rd), total disbursements per mile of responsibility (35th), capital/bridge disbursements per mile of responsibility (34th) and receipts per mile of responsibility (33rd). On balance the state is achieving above-average system performance at above-average costs.

lowa

Iowa with 9,266 miles of state-owned highway stood **35**th in the overall performance rankings in 2005. This represents a sharp decline from 23rd position in 2000. Iowa scored best on maintenance disbursements per mile of responsibility (15th), administrative disbursements per mile of responsibility (16th), total disbursements per mile of responsibility (19th), urban interstate congestion (19th), capital/bridge disbursements per mile of responsibility (20th) and receipts per mile of responsibility (22nd). Its lowest ratings were for urban interstate condition (48th) and rural primary pavement condition (45th). So, relatively low unit costs appear insufficient to hold the system at good condition levels.

Kansas

Kansas has 10,549 miles of state-owned highway. In 2005, the state ranked 3rd in the overall performance rankings, compared to 6th in 2000. Kansas reported no urban interstate in poor condition and no rural interstate in poor condition. Hence it tied for 1st in both these categories. It also scored well on rural primary arterials narrow (9th), urban interstate congestion (10th) and rural primary pavement condition (11th). Its lowest ratings were for capital/bridge disbursements per mile of responsibility (30th), total disbursements per mile of responsibility (27th) and fatality rate (26th). Overall Kansas is achieving superior system condition at lower-than-average costs.

Kentucky

In 2005, Kentucky with a total of 27,753 miles of state-owned highway ranked 12th in the overall performance ratings as compared to 10th in 2000. It reported no rural interstate in poor condition and no rural primary pavement in poor condition.



Hence it tied for 1st on both these categories. It also scored well on maintenance disbursements per mile of responsibility (7th), total disbursements per mile of responsibility (8th), capital/bridge disbursements per mile of responsibility (9th), administrative disbursements per mile of responsibility (12th), receipts per mile of responsibility (15th) and urban interstate condition (15th). Its lowest ratings were for urban interstate congestion (45th), fatality rate (45th), deficient bridges (40th) and rural primary arterial narrow (38th). So, the state's overall rating is based on relatively thin budget and modest system condition.

Louisiana

Louisiana has 16,696 miles of highway under state control. Overall the state ranked 30th in performance in 2005 as compared to 42nd in 2000. It scored best on administrative disbursements per mile of responsibility (6th), receipts per mile of responsibility (16th) and total disbursements per mile of responsibility (17th). Its lowest ratings were for fatality rate (46th), rural primary pavement condition (40th), deficient bridges (38th) and urban interstate in poor condition (36th). Louisiana's overall rating is based on holding cost down resulting in some system deterioration; Hurricane Katrina, in September 2005, may have contributed somewhat to lower system condition.

Maine

Maine has 8,684 miles of highway under state control. In 2005, the state ranked 23rd on the overall performance ratings as compared to 15th in 2000. Its best ratings were for rural interstate condition (1st) with none in poor condition reported, urban interstate congestion (5th), capital/bridge disbursements per mile of responsibility (8th), administrative disbursements per mile of responsibility (8th) and fatality rate (11th). It scored lowest on rural primary pavement condition (44th), rural primary pavement narrow (44th) and deficient bridges (36th). Maine's overall rating has slipped slightly in recent years as rural primary road conditions have worsened.

Maryland

Maryland has 3,277 miles of state-owned highway. Overall, the state ranked 38th in performance in 2005 as compared to 34th in 2000. It scored best on fatality rate (9th) and rural primary pavement condition (21st). Its lowest ratings were for capital/bridge disbursements per mile of responsibility (46th), urban interstate congestion (46th), maintenance disbursements per mile of responsibility (45th), receipts per mile of responsibility (42nd) and total disbursements per mile of responsibility (42nd). Maryland's relatively high unit costs offset its good performance on several condition indicators.

Massachusetts

In 2005, Massachusetts reported a total of 3,257 miles of state-owned highway.

The state ranked **45**th in the overall performance ratings in 2005, compared with 49th in 2000. Its best ratings were for rural interstate condition (1st), rural primary pavement condition (1st), fatality rate (1st) and urban interstate in poor condition (13th). It scored lowest on receipts per mile of responsibility (49th), capital/bridge disbursements per mile of responsibility (49th), administrative disbursements per mile of responsibility (49th), total disbursements per mile of responsibility (49th), maintenance per mile of responsibility (46th) and deficient bridges (45th). Massachusetts has achieved good condition ratings on most condition indicators but at a relatively high unit cost compared with other states.

Michigan

The state-owned highway system of Michigan consists of 9,735 miles. Overall in 2005 the state ranked 42nd on the performance ratings as compared to 43rd in 2000. Its best ratings were for fatality rate (8th) and rural primary pavement condition (24th). Its lowest ratings were for rural interstate condition (46th), urban interstate condition (42nd), capital/bridge disbursements per mile of responsibility (41st), total disbursements per mile of responsibility (39th) and rural primary pavements narrow (39th). Challenging climate and traffic circumstances along with relatively high unit costs, have contributed to Michigan's overall rating.

Minnesota

Minnesota has 13,182 miles of highway under the state control. In 2005, the state ranked 13th on the overall performance ratings. This compares to 12th in 2000. It scored best on rural interstate condition (1st) with no poor miles reported, fatality rate (4th) and deficient bridges (5th). Its lowest rankings were for urban interstate congestion (49th) and maintenance disbursements per mile of responsibility (35th). Minnesota seems to be holding its own despite rising congestion and unit costs.



Mississippi

Mississippi has a state-owned highway system of 10,948 miles. Overall, the state ranked **25**th in the performance ratings in 2005. This compares to 21st in 2000. It scored best on maintenance disbursements per mile of responsibility (6th), administrative disbursements per mile of responsibility (11th), urban interstate congestion (12th), total disbursements per mile of responsibility (16th), receipts per mile of responsibility (17th) and capital/bridge disbursements per mile of



responsibility (19th). Its lowest ratings were for fatality rate (47th), rural primary pavement condition (42nd) and rural interstate condition (38th). Otherwise sound performance on the cost side is being offset by under-performance of Interstate and rural primary condition.

Missouri

In 2005 Missouri reported a total of 32,464 state-owned miles. Missouri is one of the states that sharply improved its ranking of overall performance from 2000, from 39th in 2000 to 17th in 2005. Its best ratings were for administrative disbursements per mile of responsibility (3rd), receipts per mile of responsibility (6th), total disbursements per mile of responsibility (6th) and capital/bridge disbursements per mile of responsibility (7th). It scored lowest on deficient bridges (41st), rural primary pavements narrow (40th) and fatality rate (37th). So, while holding down and focusing expenditures, Missouri faces continuing challenges but is moving in the right direction.

Montana

Montana has 10,789 miles of highway under the state control. In 2005, the state ranked 5th in the overall performance rankings, as compared to 5th in 2000. Its best rankings were for urban interstate congestion (1st) with none reported, maintenance disbursements per mile of responsibility (2nd), total disbursements per mile of responsibility (4th), receipts per mile of responsibility (5th), capital/bridge disbursements per mile of responsibility (10th), administrative disbursements per mile of responsibility (10th), rural primary pavements narrow (10th) and rural primary pavement condition (12th). Its worst rankings were for fatality rate (50th) and urban interstate condition (40th). So, generally light traffic and good system condition combined with relatively low unit costs have enabled Montana to remain near the top on overall rating.

Nebraska

Nebraska in 2005 reported a total of 10,256 miles under the state control. Overall the state scored 19th in the performance ratings in 2005, compared to 29th in 2000. It scored best on maintenance disbursements per mile of responsibility (9th), receipts per mile of responsibility (12th), total disbursements per mile of responsibility (12th), capital/bridge disbursements per mile of responsibility (13th), rural primary pavement narrow (13th), urban interstate congestion (14th) and administrative disbursements per mile of responsibility (14th). It scored lowest on urban interstate condition (45th) and rural interstate condition (36th). Nebraska's relatively low unit costs, combined with sound system performance, contribute to its overall solid rating.

Nevada

Nevada has 5,922 miles of highway under the state-owned system. In 2005, the state ranked 9th in the overall performance ratings as compared to 13th in 2000. Nevada scored best on rural interstate condition (1st), rural primary pavement condition (1st), rural primary pavement narrow (1st) and deficient bridges (1st). It scored lowest on fatality rate (44th), capital/bridge disbursements per mile of responsibility (38th), receipts per mile of responsibility (35th) and total disbursements per mile of responsibility (33rd). Relatively low traffic and good system condition are sufficient to offset relatively high costs and accident rates.

New Hampshire

The total state-owned highway system of New Hampshire consists of 4,004 miles of highway. In 2005 the state ranked 34th in the overall performance ratings as compared to 26th in 2000. Its best ratings were for rural interstate condition (1st), urban interstate condition (1st) and capital/bridge disbursements per mile of responsibility (4th). It scored lowest on rural primary pavement condition (48th), maintenance disbursements per mile of responsibility (41st), deficient bridges (37th) and urban interstate congestion (34th). Increasing urbanization, a challenging climate and higher unit costs are offsetting otherwise sound performance.



New Jersey

New Jersey has 2,906 miles of state-owned highway. Overall, the state ranked 50th in the overall performance ratings in 2005. This compares to 50th in 2000. It scored best on rural primary pavements narrow (1st) and fatality rate (5th). Its lowest rankings were for receipts per mile of responsibility (50th), capital/bridge disbursements per mile of responsibility (50th), administrative disbursements per mile of responsibility (50th), maintenance disbursements per mile of responsibility (50th), total disbursements per mile of responsibility (50th), urban interstate congestion (48th), rural interstate pavement condition (47th) and urban interstate



condition (43rd). Very high unit costs relative to other states, in combination with traffic, more than offset low accident rates and rural pavement condition.

New Mexico

In 2005, New Mexico reported 12,205 miles under the state control. The state ranked 4th in the overall performance ratings in 2005. This represents a sharp improvement from 2000 when the state ranked 27th. Its best ratings were for rural interstate condition (1st), capital/bridge disbursements per mile of responsibility (5th), urban interstate congestion (9th), receipts per mile of responsibility (10th), deficient bridges (12th), total disbursements per mile of responsibility (13th) and rural primary pavement condition (16th). Its worst ratings were for fatality rate (43rd) and administrative disbursements per mile of responsibility (35th). New Mexico's solid condition ratings are more than enough to offset its high fatality rate and administrative costs.

New York

New York in 2005 reported a total of 15,707 miles of highway under the state control. Overall in 2005, the state ranked 48th in the overall performance ratings, as compared to 47th in 2000. New York scored best on fatality rate (6th). Its lowest rankings were for rural interstate condition (49th), receipts per mile of responsibility (47th), maintenance disbursements per mile of responsibility (47th), total disbursements per mile of responsibility (47th), rural primary pavement condition (47th), urban interstate condition (47th) and deficient bridges (47th). New York's high unit costs, combined with challenging climate and traffic circumstances, have resulted in a relatively low overall ranking.

North Carolina

North Carolina has the largest state-owned highway system, at 79,779 miles, overtaking Texas which has just 128 fewer miles. Overall the state ranked 31st in performance in 2005, compared with 25th in 2000. North Carolina scored best on receipts per mile of responsibility (4th) and capital/bridge disbursements per mile of responsibility (6th). Its lowest ratings were for urban interstate congestion (47th), rural interstate pavement condition (41st), rural primary pavement condition (41st) and urban interstate pavement condition (39th). The state's low unit cost advantage is being offset by deteriorating system condition.

North Dakota

North Dakota has a total of 7,405 miles under the state-owned highway system. In 2005, the state ranked 1st in the overall performance ratings, compared to 2nd in 2000. Its best rankings were for urban interstate condition (1st), urban interstate congestion (1st), rural primary pavements narrow (1st), rural interstate condition (1st), administrative disbursements per mile of responsibility (1st), maintenance disbursements per mile of responsibility

(1st), receipts per mile of responsibility (2nd) and total disbursements per mile of responsibility (5th). Its lowest ratings were for rural primary pavement narrow (37th) and fatality rate (32nd). North Dakota's relatively low traffic volumes and good system condition, combined with relatively low unit costs, have consistently placed it in the top-performing states.

Ohio

Ohio has 22,461 miles of highway under the state control. Overall, the state ranked **16**th in the performance ratings in 2005 as compared to 22nd in 2000. The state scored best on rural interstate condition (1st), urban interstate condition (14th) and fatality rate (14th). It scored lowest on urban interstate congestion (42nd) and rural primary pavement narrow (37th). Ohio shows steady system improvement with attention to unit costs.

Oklahoma

In 2005, Oklahoma reported 13,389 miles of highway under the state control. The state ranked **24**th in the overall performance rankings in 2005, as compared to 31st in 2000. Oklahoma's best ratings were for capital/bridge disbursements per mile of responsibility (11th), receipts per mile of responsibility (14th), total disbursements per mile of responsibility (15th), urban interstate congestion (15th), rural primary pavement narrow (15th) and maintenance disbursements per mile of responsibility (17th). Its lowest ratings were for urban interstate condition (46th), deficient bridges (42nd), rural primary pavement condition (38th) and fatality rate (33rd). Oklahoma's worse-than-average system performance is offset by its relatively low unit costs.

Oregon

The state-owned highway system of Oregon consists of 12,065 miles of highway.

In 2005, the state ranked 8th in the overall performance ratings as opposed to 7th in 2000. Oregon scored best on urban interstate condition (1st), rural interstate condition (1st) and maintenance per mile of responsibility (8th). The state's lowest ratings were for rural primary pavement condition (35th), deficient bridges (29th) and rural primary pavement narrow (28th). Oregon displays overall steady performance.

Pennsylvania

Pennsylvania has 43,283 miles of highway under the state control. Overall, the state stood 36nd in the performance ratings in 2005, compared with 33rd in 2000. Pennsylvania scored best on capital/bridge disbursements per mile of responsibility (18th), urban interstate condition (21st) and urban interstate congestion (23rd). Its lowest rankings were for rural primary pavement narrow (49th), deficient bridges (49th) and maintenance disbursements per mile of responsibility (37th). Pennsylvania balances its average total disbursements with average conditions.

Rhode Island

In 2005, Rhode Island reported 1,102 miles of highway under the state-owned highway system. The state ranked 47th in the performance rankings in 2005 as compared to 36th in 2000. The state's best ratings were for rural interstate condition (1st), urban interstate condition (1st) and fatality rate (7th). The state scored lowest on deficient bridges (50th), rural primary pavement condition (49th),



maintenance disbursements per mile of responsibility (48th), total disbursements per mile of responsibility (45th), capital/bridge disbursements per mile of responsibility (45th), receipts per mile of responsibility (44th), administrative disbursements per mile of responsibility (44th) and urban interstate congestion (43rd). Rhode Island has relatively high costs compared to system condition.

South Carolina

South Carolina, with a total of 41,582 miles of state-owned highway, stood 2nd in the overall performance rankings in 2005. This compares to 3rd in 2000. South Carolina scored best on receipts per mile of responsibility (1st), capital/bridge disbursements per mile of responsibility (1st), total disbursements per mile of responsibility (1st), rural interstate condition (1st), administrative disbursements per mile of responsibility (4th) and maintenance per mile of responsibility (5th). The state also rated high (1st) for rural interstate pavement condition, 12th for urban interstate condition, and 14th for rural primary condition. Its lowest rankings were for fatality rate (48th) and urban interstate congestion (33rd). South Carolina has consistently solid performance with a relatively thin budget.

South Dakota

South Dakota in 2005 reported 8,038 miles under the state control. Overall the state ranked 11th in the performance rankings in 2005. The state has sharply improved 19 positions from 2000 (30th). The state scored best on rural interstate condition (1st), urban interstate congestion (1st), rural primary pavement narrow (1st), maintenance



disbursements per mile of responsibility (4th), receipts per mile of responsibility (7th) and total disbursements per mile of responsibility (9th). Its lowest ratings were for fatality rate (49th) and rural primary pavement condition (43rd). In spite of a high fatality rate, South Dakota's good system performance and low spending earn it a high overall ranking.

Tennessee

Tennessee has a total of 14,163 miles of highway in the state-owned system. The state ranked 20th in the overall rankings in 2005 as compared to 20th in 2000. Its best rankings were for rural interstate condition (1st), deficient bridges (14th), urban interstate condition (18th) and rural primary pavement condition (19th). Tennessee scored lowest on rural primary pavement narrow (43rd) and fatality rate (35th). Tennessee has consistently solid performance and average spending.

Texas

Texas has the second largest (behind North Carolina) state-owned highway system at 79,651 miles. Overall, the state ranked 15th in the performance ratings in 2005, as compared to 8th in 2000. Its best ratings were for administrative disbursements per mile of responsibility (9th), deficient bridges (16th) and rural primary pavement condition (18th). Texas scored lowest on urban interstate congestion (41st) and rural primary pavement narrow (36th). For a large state with several major urban areas this is sound performance.

Utah

Utah has 5,868 miles of highway under the state control. In 2005 the state stood 21st in the overall performance rankings as compared to 24th in 2000. Its best ratings were for rural primary pavement condition (1st), urban interstate condition (1st), rural primary pavement narrow (1st), deficient bridges (8th) and fatality rate (10th). It scored lowest for rural interstate condition (44th), administrative disbursements per mile of responsibility (37th), total disbursements per mile of responsibility (36th) and receipts per mile of responsibility (34th).

Vermont

The state of Vermont has 2,844 miles of highway under state control. Overall, the state ranked 37th in the performance rankings in 2005, unchanged from 37th in 2000. Vermont scored best on urban interstate condition (1st), fatality rate (3rd) and urban interstate congestion (7th). The state scored lowest on rural primary pavement condition (46th), deficient bridges (44th), rural primary pavements narrow (42nd) and administrative disbursements per mile of responsibility (37th).



Virginia

In 2005, Virginia reported 57,884 miles of highway under the state-owned highway system. The state ranked 18th in the overall performance rankings in 2005 as compared with 14th in 2000. The state's best scores were for rural interstate condition (1st), capital/bridge disbursements per mile of responsibility (2nd), administrative disbursements per mile of responsibility (7th), total disbursements per mile of responsibility (7th), receipts per mile of responsibility (8th) and fatality rate (13th). It scored lowest on rural primary pavements narrow (46th) and rural primary pavement condition (34th). Virginia has good system condition managed on a thin budget.

Washington

Washington stood 32th in overall performance rankings in 2005 with 17,836 miles of state-owned highway. This compares to 18th in 2000. The state's best rankings were for fatality rate (12th), rural primary pavement condition (15th) and administrative disbursements per mile of responsibility (20th). Washington scored lowest on rural primary pavements narrow (48th) and rural interstate condition (42nd).

West Virginia

West Virginia in 2005 reported a total of 34,051 miles of state-controlled highway.

Overall, the state ranked 26th in 2005 in the performance rankings as compared to 32nd in 2000. Its best rankings were for total disbursements per mile of responsibility (2nd), maintenance disbursements per mile of responsibility (3rd), capital/bridge disbursements per mile of responsibility (3rd), receipts per mile of responsibility (3rd), administrative disbursements per mile of responsibility (5th) and urban interstate congestion (6th). Its lowest rankings were for rural primary pavements narrow (50th), deficient bridges (48th), rural interstate condition (37th) and fatality rate (36th). Low system performance rankings balance low spending for a mid-range overall performance rank.

Wisconsin

Wisconsin has 11,794 miles of highway under the state control. In 2005, the state stood 22nd in the overall performance rankings as compared to 16th in 2000.

Wisconsin scored best on deficient bridges (6th), rural primary pavements narrow (16th), urban interstate congestion (17th), fatality rate (20th) and maintenance disbursements per mile of responsibility (20th). The state scored lowest on rural interstate condition (39th), administrative disbursements per mile of responsibility (38th), total disbursements per mile of responsibility (37th), receipts per mile of responsibility (36th) and capital/bridge disbursements per mile of responsibility (36th).

Wyoming

Wyoming has 7,404 miles of highway under state control. In 2005 the state ranked 7th in the overall performance rankings as compared to 1st in 2000. Wyoming's best ratings were for urban interstate congestion (1st), deficient bridges (3rd), receipts per mile of responsibility (11th), total disbursements per mile of responsibility (12th), rural primary pavement condition (13th), rural primary pavement narrow (14th) and maintenance disbursements per mile of responsibility (14th). Wyoming's only low ranking is 41st in urban interstate condition. The state's overall performance is good.

About the Authors

Avid T. Hartgen, David T. Hartgen, Ph.D., P.E. is Emeritus Professor of Transportation Studies at the University of North Carolina at Charlotte, where he established the Center for Interdisciplinary Transportation Studies and now conducts research in transportation policy. Before coming to Charlotte he was at the New York State Department of Transportation and the Federal Highway Administration He is the author of about 335 papers and reports on transportation policy and planning, is U.S. Editor of the international journal *Transportation*, and is active in professional organizations, particularly the Transportation Research Board. He holds engineering degrees from Duke University and Northwestern University, has taught at SUNY Albany, Union University, Syracuse University and lectures widely. His recent studies of congestion for Reason Foundation (at www.reason.org) and transit and congestion for the John Locke Foundation (at www.johnlocke.org) have attracted wide national attention. He can be contacted at dthartge@uncc.edu, or by telephone at 704-687-5917.

Ravi K. Karanam is graduate student in electrical engineering at the University of North Carolina at Charlotte. A graduate of Nehru Technological Institute in India, he is focusing on computer architecture, electronics and telecommunications technologies, embedded systems, and computational applications in the biomedical sciences.

Related Reason Studies

Peter Samuel, Leasing State Toll Roads: Frequently Asked Questions, Reason Foundation Policy Brief No.60, March 2007, http://www.reason.org/pb60_leasing_state_toll_roads.pdf

Leonard C. Gilroy, Robert W. Poole, Jr., Peter Samuel, and Geoffrey Segal, *Building New Roads Through Public-Private Partnerships: Frequently Asked Questions*, Reason Foundation Policy Brief No.58, March 2007, http://www.reason.org/pb58_building_new_roads.pdf

Peter Samuel, *Innovative Roadway Design: Making Highways More Likeable*, Reason Foundation Policy Study No.348, September 2006, http://www.reason.org/ps348.pdf

David T. Hartgen, Ph.D., P.E., and M. Gregory Fields, *Building Roads to Reduce Traffic Congestion in America's Cities: How Much and at What Cost?*, Policy Study No. 346, August 2006

Robert W. Poole, Jr. and Kevin Soucie, *Adding FAST Lanes to Milwaukee's Freeways: Congestion Relief, Improved Transit, and Help with Funding Reconstruction*, Reason Foundation Policy Study No.342, February 2006, http://www.reason.org/ps342_FASTlanes.pdf

Peter Samuel, *Should States Sell Their Toll Roads?*, Reason Foundation Policy Study No.334, June 2005, http://www.reason.org/ps334.pdf

Robert W. Poole, Jr., *Easing California's Transportation Crisis with Tolls and Public-Private Partnerships*, Reason Foundation Policy Study No.324, January 2005, http://www.reason.org/ps324.pdf

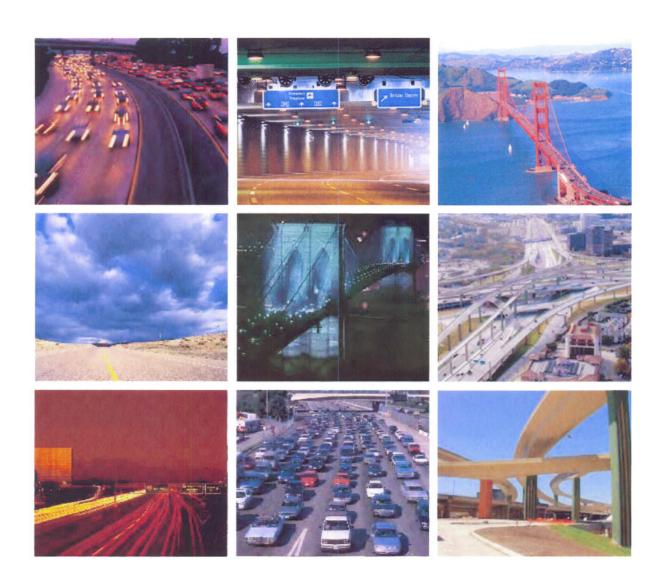
Robert W. Poole, Jr., and Peter Samuel, *Corridors for Toll Truckways: Suggested Locations for Pilot Projects*, Reason Foundation Policy Study No.316, February 2004, http://www.reason.org/ps316.pdf

Robert W. Poole, Jr. and C. Kenneth Orski, *HOT Networks: A New Plan for Congestion Relief and Better Transit*, Reason Foundation Policy Study No.305, February 2003, http://www.reason.org/ps305.pdf

Endnotes

Cost effectiveness for each state is computed by averaging its 12 performance ratios (ratio of each state's statistic to the national average, for 5 financial measures and 7 condition measures). Financial ratios are weighted inversely by relative road widths lane miles per mile per U.S. avg. Ratios less than 1.0 mean that the state is better than average, ratios greater than 1.0 mean the state is worse than average.

FHWA uses 0.80 as the cutoff for 'congestion', but this ignores mild congestion in some rural states.





Reason Foundation 3415 S. Sepulveda Blvd., Suite 400 Los Angeles, CA 90034 310/391-2245 310/391-4395 (fax) www.reason.org